

RAMON MAGSAYSAY AWARDS

1958-1968



RAMON MAGSAYSAY AWARD FOUNDATION
Manila, Philippines

*This pamphlet presents a summary of the Ramon Magsaysay
Awardees from 1958 to 1968.*

*BOARD OF TRUSTEES
Ramon Magsaysay Award Foundation*

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THE RAMON MAGSAYSAY AWARD

IN RECOGNITION OF GREATNESS OF SPIRIT SHOWN IN SERVICE TO THE PEOPLE

The life of Ramon Magsaysay had great impact not only in the Philippines but on many people in many lands. He was one of the outstanding leaders of our time.

Ramon Magsaysay commanded the admiration, respect and affection of people because he was a simple, humble man; because he cared for all people as individuals and believed in their dignity and importance, and because he had the courage of his convictions. His objective was to improve the lot of his countrymen and he approached the task with selfless devotion. He was convinced that government to last and to be sound must have integrity and reflect the will of the people.

A man of greatness of spirit, he saw his fellowmen born with the right to live in liberty and happiness. He angered at injustice and the violation of high principles. He worked to build a nation—a world—in which freedom could be enjoyed by all and man could live with man in honor and peace.

The world is the richer and better because Ramon Magsaysay lived. His spirit will continue to be an inspiration. He exemplifies the highest type of leadership and as such is a source of strength and confidence to men everywhere who are sincerely concerned about the well-being of their fellowmen.

To honor Ramon Magsaysay and to give recognition to those ideals which characterized his life and the courageous service which he rendered to the people of the Philippines, the Ramon Magsaysay Award is established.

1958

GOVERNMENT SERVICE

CHIANG MON-LIN (Chinese), "for his distinguished government service in rural reconstruction."

PUBLIC SERVICE

MARY RUTNAM (Canadian-born Ceylonese), "for her dedicated service to others as a private citizen."

COMMUNITY LEADERSHIP

ACHARYA VINOBA BHAVE (Indian), "for his inspiration and help to the man on the land."

INTERNATIONAL UNDERSTANDING

OPERATION BROTHERHOOD, "for its advancement of friendship between peoples of different countries."

JOURNALISM AND LITERATURE

MOCHTAR LUBIS (Indonesian), "for his promotion of the public good through a free and courageous press."

R. McCULLOCH DICK (Scotsman by birth, Filipino by "adoption"), "for his effective publishing as a power for the public good."

CHIANG MON-LIN

(1886-1964)

Dr. Chiang Mon-lin, the Chinese Chairman of the Joint Commission on Rural Reconstruction on Taiwan, has been elected to receive the Award for Government Service, in recognition of his distinguished leadership of the Chinese and American program that has been largely instrumental in bringing about significant improvements in rural life on Taiwan and the other islands under the administration of the Government of the Republic of China.

As the late Ramon Magsaysay, whose ideals the Award is founded to perpetuate, sought vigorously to improve the lot of rural folk in the Philippines, so have Dr. Chiang and the JCRR devoted insight, technical skills and resources to this task.

The JCRR addressed itself nearly 10 years ago to this proposition: In order for a country where agriculture predominates to prosper, the people engaged in agricultural pursuits must live decently and with hope and be consciously prepared to contribute their fair share to efforts beneficial to them. To this end a JCRR "formula" was evolved that has been notably successful. The emphasis has been upon "digested" innovations which could be made to work without wrecking older values.

The tangible evidences of JCRR's catalytic influence may readily be observed. Rice production, for example, has been increased by nearly 50 per cent through a country-wide network that provides to rice growers selected seed multiplied by some 8,000 model farmers; by control of plant pests; by repair extension and careful maintenance of irrigation systems; and by regular application of both natural and chemical fertilizers. Rinderpest, that once threatened to destroy a large segment of Taiwan's cattle population, has been eradicated. The hog population has been increased from 800,000 to 3.2 million. A well-rounded fortnightly farm magazine now has more than 30,000 paid subscribers.

Dramatic in themselves are the more than 350,000 acres of once denuded hillsides that were creating a serious erosion problem and now are covered with trees, as a result of the Green Island Movement encouraged and assisted by the JCRR.

Equally important, the JCRR has helped insure social justice through effective land reform and through organization of farmers to process and market their produce, to maintain their own health clinics, their irrigation canals and otherwise enrich rural life.

Through the accomplishments of the JCRR are the work of more than one or a few men, Dr. Chiang has lent to the effort a broad, humanitarian view and thereby provided a balance that has been vital to its success. He has moderated with tact and consideration the difference between the various specialists who have argued for greater emphasis on their particular aspects of rural reconstruction.

With his ability to adapt himself to a given situation and make the most of it, Dr. Chiang has led the JCRR through a maze of regulations, procedures and policies of both the Chinese and American governments that could seriously have impaired the effort. And the JCRR's integrity and direction have been kept intact.

The philosophic attitude that Dr. Chiang, who was for 15 years Chancellor of one of China's leading universities, has brought to this government organization is pervasive. Both the Chinese and Americans who have participated in the JCRR seem to have set aside their nationality, as such, and to have felt themselves intimately part of a team with a job to do. The *esprit de corps* of the organization has been consistently high. There is a tolerance and flexibility, and yet a high degree of selectivity, that permits unusually effective cooperation both internally and externally, with the agencies sponsoring the projects JCRR has assisted, whether they be the provincial or local governments or farmers' organizations.

Like Ramon Magsaysay, Chiang Mon-lin sets a high standard of government service. His yardstick for personal effort is achievement rather than reward. He is a modest man, who credits the success of projects JCRR has assisted entirely to the particular specialists involved and especially to those officials and local people who have sponsored them. And as one of his former colleagues on the Commission described this man: "Chiang Mon-lin has uncommon common sense."

MARY RUTNAM

(1873-1961)

Dr. Mary Rutnam, Canadian-born Ceylonese social service leader, has been elected to receive the Award for Public Service, in recognition of her gift of service to the Ceylonese people and of the example she has set by her full life of dedication as a private citizen to the needs of others.

From her inspiration and leadership volunteer social services in many fields have grown and been sustained that are of tangible benefit, particularly to the rural women of Ceylon, and of immeasurable intangible benefit to all levels of the society she has made her own.

A spirit of service kindred to that of the late Ramon Mag-saysay characterizes the life and activities of Mary Rutnam. And, like the late President, this extraordinary woman commands the admiration, respect and affection of the people she has served so well.

Best known among those to whom poverty, sickness and hunger have been no strangers, Dr. Rutnam's work has not been based merely on philanthropy, as such, but on a desire to be of help to depressed people.

She came to Ceylon in 1896 to join the American Medical Mission at Jaffna. Married two years later to a Tamil Ceylonese, who was a teacher by profession, Dr. Rutnam took up the private practice of medicine in Colombq shortly thereafter. Since then, for 61 years, she has labored ceaselessly as a doctor, Ceylon's first woman municipal councilor and social worker. With all, she was first a wife and mother of five.

Perhaps her greatest contribution has been the introduction of women's institutes into Ceylon, known as the Lanka Mahila Samiti. The growth of this successful island-wide movement "for the social uplift of women in Ceylon's villages" is largely due to her efforts. It has done much to alter the status of village women and it has advanced the villages as a whole, through education of children and adults, training of village workers in health,

sanitation, nutrition and cultivation of home gardens and through the development of cottage industries.

Dr. Rutnam's has been a realistic approach. He has given not only ideas. She has edited a number of textbooks on health and homecraft which today are widely used in Ceylonese schools. She has organized, lectured, doctored, demonstrated her theories and written articles to bring the ideas to fruition. She has shared with others the disappointments and the hard work, as well as the satisfaction, that are part of such efforts.

Her object in forming women's institutes and organizations was also to secure political rights for women and prepare them for the exercise of this franchise, but chiefly it was to encourage them to take a close and deep interest in such matters as public health, civic education, temperance and nutrition.

In a society divided by caste and creed, Dr. Rutnam has sought to enhance the self-respect of the less fortunate by showing them practical ways to achieve self-support. To those among the more fortunate who have emulated her example, she has demonstrated that it is not only their social responsibility but also their privilege to volunteer their effort and their means to the service of their fellowmen.

Though her age has dictated retirement from active practice, this "small, white-haired lady with piercing blue eyes" continues to demonstrate a keen interest in the many activities she was instrumental in establishing. And even today she is helping to plan needed homes for convalescent and mentally deficient children.

In tribute to her work, her birthday has been observed since 1954 as Mahila Samiti Day throughout Ceylon. A citation on one occasion read:

"Dr. Rutnam has done more than any other single person to focus attention on the needs and problems of the rural people and the less privileged in the towns. . . A Canadian by birth. . . she is Ceylon's best loved and most revered citizen."

In acknowledging such remarks, Dr. Rutnam once wrote: "It has been said that 'in creating each of us with some peculiar talent, God has given us a call to some peculiar work.'"

VINOBA BHAVE

(1895-)

Acharya Vinoba Bhave, the Indian Bhoodan leader, is chosen for the Community Leadership Award, in recognition of the cause he has furthered of arousing his countrymen toward voluntary action in erasing social injustice and economic inequalities.

His has been a life selflessly devoted to finding and conveying to his people an approach to the problem of poverty that is within the means of every village. He has sought to create first the climate for social reform—to awaken in his people a social conscience and a consciousness of inner strength. Then he has proposed ways whereby needed reform may be accomplished voluntarily.

Acharya Vinoba, like the late President Magsaysay, is a humble man who has abiding faith in the basic goodness of human character and the tempering effect of the human conscience. This frail, retiring disciple of Gandhi, in the non-political sphere, now is in his seventh year of walking through India asking those who have land to share it with those who do not. He has sought nothing for himself, least of all recognition of his achievements, and has won the high respect of his countrymen.

"Land for landless," adopted by the Magsaysay administration as one of its goals, is a primary objective of the Bhoodan Movement started by Vinoba Bhave in 1951, with the emphasis on the voluntary gift of land. Vinoba's aim is to secure 50 million acres for 10 million landless farming families. He has been remarkably successful. His gentle persuasion has resulted in donations amounting to about five million acres of farmland. The rich have contributed and the poor have given to the poorer.

The Bhoodan Movement, meanwhile, has grown in concept. Included now are *sampattidan* (cash gift), *sadhan dan* (gifts in kind, such as equipment, tools, etc.) and *jeewan dan* (life gift) whereby an individual may either devote entirely to bhoodan work

or may continue his chosen vocation but adhere to strict principles of self-conduct and social service. Attention also is given to other constructive activities, such as basic education, spinning and village industries, especially in gramdan villages where the entire land of the villages has been donated for redistribution among all of the families according to their mutually recognized needs.

To those who argue that the form of sharing which he proposes will lead to further fragmentation of land in India and adversely affect agricultural production, Vinoba has replied: "There is more to fear from the fragmentation of human hearts than the fragmentation of land. . . (the one) can be easily consolidated later with mutual good will and cooperation, but the fragmentation of hearts due to economic inequalities is full of dangerous possibilities."

The impact he has had is suggested in a Government of India publication entitled *Acharya Vinoba Bhave*: "He has demonstrated the amount of social good that can be attained through personal example, character and the like—political power notwithstanding. The way he is seeking to solve the land problem shows that other problems likewise can be peacefully tackled by moral persuasion . . . Acharya Vinoba Bhave is creating in rural areas an army of workers, whose unified action would work a new kind of social revolution in the countryside."

OPERATION BROTHERHOOD

Operation Brotherhood, an organization originated in the Philippines that has provided medical services to refugees and villagers in Vietnam and Laos in a time of need, has been elected to receive the Award for International Understanding, in acknowledgement of the spirit of service to other peoples with which it was conceived and has been carried forward as well as the international amity it has fostered.

In making this election, the Board of Trustees of the Award Foundation recognizes all of those men and women who have participated in this work, the Junior Chamber of Commerce that has been the operation's civic sponsor and those other organizations, government agencies and individuals in the Philippines and many countries who have rallied to its support.

The late President Ramon Magsaysay, whose humanitarian spirit the Award commemorates, personally helped provide initial impetus to the drive for the succor of war-ravaged South Vietnam and the thousands of refugees who, in mid-1954, chose to uproot themselves from their homes and seek in the South a sanctuary not hostile to their faith or political convictions.

Speaking to a convention of the Philippine Junior Chamber of Commerce on May 3, 1956, he said of Operation Brotherhood:

"While others viewed with despair, cynicism and futility the struggling efforts of Free Vietnam to resist the yoke of Communism, you volunteered friendship, understanding and tangible aid. . ."

The first Operation Brotherhood team (seven doctors and three nurses) was flown to Saigon aboard a Philippine Red Cross plane in October, 1954.

The international cooperation that has been evoked by this operation has not only been between Vietnamese, Lao and Filipinos, but has extended far beyond to bring together, in their

generous response to human need, people both of the East and the West.

Following the Philippines' lead, material aid in cash, medicines and supplies—in some instances bolstered by actual participation through medical teams—has been received from Australia, Burma, Canada, Ceylon and the Republic of China (Taiwan), England, France, Hongkong, Japan, Korea, Malaya, Mexico, New Zealand, Singapore, Thailand and the United States.

Today, as Operation Brotherhood nears completion of its fourth year of activity, its record of service is in itself an inspiration. Working most often under strenuous circumstances, O.B. teams had treated some 730,000 persons before operations were closed in Vietnam on December 21, 1956. At its maximum the O.B. personnel there numbered 170. Since January, 1957, a 50-member group has given treatment to another 250,000 persons in Laos.

The teams now include, along with medical personnel, other technical staff, such as nutritionists, agriculturists, and social workers to propagate among the villagers the philosophy of self-help.

The impact of the operation's "mission of mercy" has been felt not only in terms of lives saved and better health attained. Of equal importance has been its heartening demonstration, in keeping with the creed of its civic sponsor, that "the brotherhood of man transcends the sovereignty of nations."

ROBERT McCULLOCH DICK

(1873-1960)

and

MOCHTAR LUBIS

(1922-)

Robert McCulloch Dick, publisher of the *Philippines Free Press*, and Mochtar Lubis, editor-in-chief and part-owner of the *Indonesia Raya*, have been elected to receive the Award for Journalism and Literature, in recognition of the courageous and constructive contribution each has made, in his way, in the profession of journalism as a power for the public good.

As Ramon Magsaysay was angered by injustice and the violation of high principles, as he worked to build a nation—a world—in which freedom could be enjoyed by all and man could live with man in honor and peace, so have Robert McCulloch Dick and Mochtar Lubis been angered and so have they worked to build.

It was after their deliberations were completed that the Board of Trustees learned August 29, 1958 marks the fiftieth anniversary of the founding of the *Philippines Free Press*. The more fitting, then that Robert McCulloch Dick, Scotsman by birth and Filipino by "adoption," is acknowledged at this time for the pioneering part he has played in establishing and maintaining the tradition of press freedom in this Republic.

From its beginning the weekly magazine published by R. McCulloch Dick has lived up to its name. It has consistently given all sides of an issue a hearing. Its staff has been encouraged to explore every event of significance—regardless of the influence of personalities that may have been involved. Despite repeated attempts to curtail publication of this journal, McCulloch Dick has not wavered in his determination to give to the people of the Philippines a "free press."

During the time of the American administration of the Philippines, the *Free Press* so vigorously presented the case for Filipino participation in management of local government that Dick was declared at one period an undesirable alien. During the time of the Republic, his magazine has brought to public attention the unsung work of good citizens, prominent and unknown alike, as well as abuses in administration that have not otherwise been reported. It has been, in a sense, a public prosecutor in the cause of honest elections, rule by law and morality in government service.

Consistent with the spirit of the late President, the *Free Press* has taken up the defense of the victims of injustice. It attends to the concerns of the people who live in the barrios. They, and the school teachers who labor among them, are among its most faithful readers. The Filipino journalists McCulloch Dick has trained and encouraged speak for themselves.

Mochtar Lubis is today waging in Indonesia the battle for freedom of the press that McCulloch Dick has helped to win in the Philippines.

At a time when this basic freedom is being threatened in many parts of the world, Lubis' example gives strength to others who share the belief that free speech and a free press are essential if government is to reflect the will of the people.

As editor-in-chief and part-owner of the *Indonesia Raya* he has continued to fight against government corruption, the violation of civil liberties by the military and against the inroads of totalitarianism in Indonesia.

Mochtar Lubis has been under house arrest since December, 1956. He has been acquitted in court of an earlier accusation that he violated Indonesia's criminal code by expressing sentiments against the government. Up to now no additional charge has been formally preferred against him.

After his detention, Lubis' wife continued to publish the *Indonesia Raya* intermittently. Recent dispatches report it has now been closed indefinitely.

In 1953, Lubis was given the Indonesian National Literary Award. Until last year, his *Indonesia Raya* enjoyed the highest

circulation of any daily in Indonesia. In a nation-wide poll conducted by students at the University of Indonesia, Lubis was judged the outstanding journalist and the *Indonesia Raya* the best newspaper for the year 1957.

Mochtar Lubis is known personally to many of the journalism fraternity who have espoused his cause. They have seen him at work in Indonesia and judge him a man of integrity and unusual competence.

The International Press Institute, a world-wide organization of editors devoted to the promotion of press freedom, at its General Assembly in Amsterdam in May, 1957, and again at an Asian Regional Conference in Ceylon last December, adopted resolutions protesting the detention of Lubis as a violation of freedom of the press.

In making this election, the Board of Trustees emphasizes its strictly private character. In summary, its selection is based on these considerations:

Mochtar Lubis is respected by his colleagues in Indonesia and abroad as an able, responsible and courageous journalist. His motivation is of a high order. He has chosen incarceration rather than compromise in the interest of enhancing rather than diminishing the area of press freedom in his country. In all of Asia there is no journalist or writer more often mentioned as exemplifying the ideals this Award is founded to perpetuate.

COMMUNITY LEADERSHIP

His Holiness, THE DALAI LAMA (Tibetan), "for his defense of his people's right to live and worship in their own way."

GOVERNMENT SERVICE

CHINTAMAN DWARKANATH DESHMUKH (Indian), "for exemplary government service in finance and university education."

JOSÉ VASQUEZ AGUILAR (Filipino), "for creative experiments in public education to benefit the common *tao*."

PUBLIC SERVICE

Father JOAQUIN VILALLONGA, S.J. (Spaniard) and DAW TEE TEE LUCE (Burmese), "for their compassionate service to others whom society had cast aside."

JOURNALISM AND LITERATURE

U LAW YONE (Burmese), "for his responsible editorship as a power for the public good."

TARZIE VITTACHI (Ceylonese), "for his courageous reportage of social conflict in the public interest."

INTERNATIONAL UNDERSTANDING

The Board of Trustees has elected to make no Award for International Understanding this year.

THE DALAI LAMA

(1935-)

His Holiness, the Dalai Lama of Tibet, has been elected to receive the Award for Community Leadership, for his leadership of the Tibetan community's gallant struggle in defense of the sacred religion that is the inspiration of their life and culture.

In recent years no event in Asia has posed a greater challenge to freedom than developments in Tibet. In striving to retain his people's right to live and worship in their own way, the Dalai Lama has brought his appeal to men of conscience everywhere. Like the late Ramon Magsaysay, he chose to stand where others have faltered in protection of fundamental human rights.

Sometimes known as the Forbidden Kingdom, Tibetan society was feudal, dominated by conservative monastic orders and hereditary nobles. It firmly stayed aloof in its "roof of the world" and sought to remain utterly free from foreign influence. Despite this restrictive tradition, the Dalai Lama has shown a keen curiosity about the outside world. The rare visitors to Tibet, Indian officials and members of the press who have met him since his flight have been impressed with the charm, intelligence and high spiritual quality of this young leader.

It was his hope to introduce better methods of farming and irrigation, to build systems of education and public health and bring other benefits to his people. Though he himself desired radical changes in land tenure and similar reforms, these, he said, "must conform with the dignity, needs and peculiar condition of my own people."

Buddhism, one of the world's great religions, has been at the heart of the Tibetan way of life. The monasteries are the conservers of learning and fully 100,000 Tibetans are monks. Since the Dalai Lama's proclamation at the age of five his life has been singularly devoted to training and study in the Buddhist tradition of scholarship and service to mankind.

In Asia where religion's role has had profound significance, the threatened destruction of this isolated land's Reformed Buddhist Church has roused the protest not only of the Buddhist world but of all faiths.

The Tibetan people have shown their preference for their own distinctive system in general uprising. As their leader, the Dalai Lama made a determined effort to bring their plight to world attention. At Mussoorie on June 20, 1959, he said, "I have endeavored to tell the real truth about Tibet. . .which must ultimately prevail, however strong the forces of evil may appear to be." "Today," he added, "I also wish to declare that we, the Buddhists, firmly and steadfastly believe in peace and desire to live in peace with all people."

CHINTAMAN DWARKANATH DESHMUKH

(1896-)

and

JOSÉ VASQUEZ AGUILAR

(1900-)

Chintaman Dwarkanath Deshmukh, Chairman of the University Grants Commission, Government of India, and José Vasquez Aguilar, former Dean of the College of Education, University of the Philippines, have been elected to receive the Award for Government, Service, for exemplary performance in the service of their respective governments. As the late President Ramon Mag-saysay regarded government office as a public trust, so has this ideal characterized the careers of this Indian and this Filipino.

Chintaman Deshmukh's name, through a distinguished career in government service, has come to be synonymous with moral integrity. As a member of the Indian Civil Service, he held responsible posts from the age of 24. While serving as Governor of the Reserve Bank of India, his country's premier financial institution, he introduced basic reforms and instituted the salutary practice of giving a complete picture of the nation's economy at the Bank's annual meeting. He also made creative contributions to international finance as India's delegate to the international monetary conferences. During the period of the First Five-Year Plan from 1950 to 1956, when the tempo of development was greatly accelerated, he as Finance Minister, withstood strong pressure and insisted on strict financial control over expenditures of public funds, eliminating many procedural delays.

An independent-minded stabilizing force, he was known as a man who expressed his opinions frankly and honestly irrespective of whether such advice would affect his political career favorably or unfavorably. Retaining the confidence of both the Government and the Congress (Party) when he resigned his Ministership in

1956 over a difference of opinion on policy, he was asked to take the Chairmanship of the University Grants Commission responsible for coordinating and maintaining standards of teaching and education in universities throughout the country.

Shri Deshmukh chose to serve his country in this less prestigious position for the nominal salary of one rupee per month with the same dedication he had shown as Minister, though he had many other high-salaried opportunities in private business. He has brought to this post a quality of scholarly competence and reason that is being felt in the universities. Adhering to Spartan discipline and holding sensitive posts at a critical time in Indian development Shri Deshmukh has set by his own example standards to follow.

As, in the realm of public policy, Ramon Magsaysay initiated bold and untried measures, so has José Aguilar been a farsighted innovator.

Dedicated to the proposition that inspiration may come from the top but the force that makes a nation strong and free must come from the people themselves, he has pioneered in making the education offered through the public schools come alive for the "forgotten masses." From the year he first taught in the one-teacher school of his home barrio, as only an intermediate school graduate, José Aguilar has devoted his energies to this work.

With his first successful experiment in 1938, using public school leadership in organizing community of Capiz to plant two rice crops instead of one, he was on his way. As Division Superintendent of Public Schools in Iloilo, he is credited with evolving concepts that were later adopted by the Bureau of Public Schools in its community school program. An integral part of his Iloilo experiment was the use of the vernacular as the medium of instruction in the first primary grades as a natural and firm link between the schools and the community.

Dr. Aguilar was the first Superintendent to take the initiative of requesting an evaluation of his school system indicating the progressive spirit of the teachers and a high sense of educational leadership in the Superintendent. Dr. Aguilar had the courage to depart from established practices and then to have his work

put to test. The Bureau supported his effort. Others adopted some of his methods and evolved new ones of their own and subsequently the Bureau incorporated the community school scheme and the use of vernacular in its national program.

This dedicated educator has set a standard of service and creative leadership to emulate and he has given his people patterns for using their schools and their own resources for building a working democracy.

JOAQUIN VILALLONGA

(1868-1963)

and

TEE TEE LUCE

(1895-)

Father Joaquin Vilallonga, S.J., former Chaplain of the Culion Leper Colony in the Southern Philippines, and Daw Tee Tee Luce, founder and Mother of the Home for Waifs and Strays in Rangoon, Burma, have been elected to receive the Award for Public Service, in recognition of their compassionate service to others whom society had cast aside.

Caring, as did Ramon Magsaysay, for all people as individuals and believing in their dignity and importance, this Spanish priest and this Burmese woman have sought particularly to improve the lot of the unfortunate and, like the late Philippine President, approached the task with selfless devotion.

Father Vilallonga first came to the Philippines in 1892 as a teacher at Ateneo de Manila, the Jesuit college that since its establishment has played a leading role in Philippine education. After his ordination as a priest and further study in Spain and the United States, Father Vilallonga was again assigned to the faculty at Ateneo, becoming Rector in 1910. He subsequently served in senior posts at Vigan, Ilocos Sur and Davao in Mindanao and in 1921 was appointed Superior of the Philippine Mission of the Society of Jesus. Then followed from 1927 a series of high administrative positions with his Society in Spain, India and the Far East.

Twelve years ago at the age of 80, Father Vilallonga asked his order to send him back to work with the lepers in Culion. Today, on his 92nd birthday he still stands "tall and straight" as he ministers to their spiritual needs.

Chaplain extraordinary, he has given the autumn years of his life, the inspiration of his experience and the warmth of his understanding to the lepers of Culion who live in the banishment of a feared disease society has not yet learned to accept in its midst.

Daw Tee Tee Luce has given abandoned and wayward boys off the streets of Rangoon not merely a roof and food but what they missed and needed most—a home and a share of her heart. Alarmed by the high incidence of crime in Burma in 1926, she spent a year studying the children in the underworld of Rangoon. Disguising herself as a boy she met the urchins at roadside food-stalls, visited them at night in brothels and opium dens. She saw where they slept, scantily clad, on doorsteps and came to know these deserted children in the clutches of crime who were orphans or whose parents were thieves or worse. Finally on a Saturday evening, September 1, 1928, she and several friends collected a group of street boys in front of a cinema house, told them what she intended to do and invited volunteers who wished to enter her Home. The intention was to start with six pupils but 19 sought admission and the Home for Waifs and Strays was launched.

From that time, except through the four war years, Daw Tee Tee and her husband, Professor Gordon H. Luce, himself an active partner in the enterprise as well as an authoritative scholar of Burmese history, have carried on with courage and singleness of purpose the mission of their Home. There have been times when outside help was slow in coming and the Luces had to stretch their last resource. But each crisis has been managed. It is a fitting coincidence that Mrs. Luce receives this Award on the eve of the Home's thirtieth anniversary.

Now there are usually between 120 to 130 boys in residence ranging from six to 18 years of age. About one-fourth are orphans or neglected children, but the majority are brought in by the police as juvenile offenders or remanded by the court while they are awaiting trial.

The atmosphere of a home rather than an institution is pervasive. The boys address Daw Tee Tee as "Mother," Professor Luce as "Father" and the Matron as "Aunt." Daw Tee Tee often

cooks the meals herself and as a family the Luces eat with them, sleep with them and care for them. The boys are given training in the useful crafts—weaving, bookbinding, carpentry, cane-work and gardening, and those prepared for more advanced education beyond the primary classes in the Home are sent out to school. Exercise is regarded as essential and there is daily swimming in a nearby lake and a period for gymnastics. The evenings are given over to cultural pursuits—the program may be a phonographic symphony concert or readings from literary classic to which the boys listen with familiarity and appreciation, grouped around the Luces in their sitting room.

There are runaways and there are other failures. The remand boys often stay so briefly that the spirit of the Home does not reach them. But for the majority Daw Tee Tee's Home has been a haven and has given them an opportunity to lead a useful and decent life. The stigma that attaches to living in an institution is erased and many have gone out to take responsible positions in their young nation.

By their works these two humanitarians exemplify an ideal of service embodied in the doctrine of many faiths and expressed by the Founder of the Christian faith in these words: "Inasmuch as ye hath doneth unto one of the least of these my brethren, ye have done it unto me."

EDWARD MICHAEL LAW YONE

(1911-)

and

TARZIE VITTACHI

(1921-)

U Law Yone, editor and publisher of *The Nation* of Rangoon, and Tarzie Vittachi, editor of the *Ceylon Observer* of Colombo, have been elected to receive the Award for Journalism and Literature, for responsible editorship and their defence of civil rights and press freedom in keeping with the highest traditions of the journalistic profession.

Like Ramon Magsaysay these editors have had the courage of their convictions. Setting personal security aside, they have employed the press as a power for the public good and worked, the one in Burma and the other in Ceylon, to build nations where man could live with man in honor and peace.

Edward Michael Law Yone founded his own newspaper in 1948. Under his guidance *The Nation* has become the leading English-language paper in Burma. It has been an outspoken defender of democratic principles and good government, and stood firmly against communism in and out of Burma.

Rejecting sensationalism, Law Yone's policy has been to make *The Nation* a paper of record, regardless of whether the news reflected well or ill on the government in power. His reasoned editorials have helped to bring about reforms that have benefitted his people and facilitated progress of his country.

He has clashed with those in authority on numerous occasions in his exposure of official corruption but has stood firm even under prosecution. His fairness was later recognized by appointment to government commissions investigating allegations of improper practices.

As well as setting editorial and technical standards by his own performance, Law Yone has otherwise strengthened Burmese journalism. Assistants recruited and trained by him are now editing leading journals. Students of a School of Journalism he helped found and has headed for three years are now staffing vernacular papers and one has started his own newspaper in the Kachin State. Law Yone also was a founder and has served as President of the Burma Journalists Association and as Chairman of the Burma National Committee of the International Press Institute.

Thus he has ably fulfilled the responsibility of his profession by presenting to his people a consistently fair and comprehensive record of events that most immediately affect their welfare and progress.

Also as critic of corruption and abuses of authority wherever he has seen them, Tarzie Vittachi has wielded a fiery pen in the public interest. A moderate liberal and a perceptive newspaperman, he has effectively helped defeat legislative efforts by some government leaders to exercise their authority beyond prescribed parliamentary bounds.

With his recent book, *Emergency '58*, Vittachi gives his people a vivid documentary of the 1958 communal riots in Ceylon. In a period when the issues at stake are still raw and potentially inflammable, but before the truth could be obscured by second thoughts, he has written with commendable objectivity a reporter's report of what occurred and how it was brought about. Himself a Sinhalese, the role of the Sinhalese and Tamils are subjected to the same harsh scrutiny. The manipulations of politicians who exploited old divisions to get votes, confused the issues and ultimately aroused violence are bluntly pointed out. He traces the historical background of the communal problems and proceeds with meticulous detail to record the day by day progress up to and through the violent disorders that swept his island-nation. The book in total is a moving appeal to all elements of Ceylonese society for a more rational attitude and specifically addresses itself to the leaders of the diverse groups who have shaped recent events in his country.

1960

PUBLIC SERVICE

SIR HENRY HOLLAND and Dr. RONALD HOLLAND (both British), "for selfless dedication of their renowned surgical skills to relieve suffering in a remote hinterlands."

GOVERNMENT SERVICE

The Board of Trustees made no Award for Government Service this year.

COMMUNITY LEADERSHIP

TUNKU ABDUL RAHMAN PUTRA AL-HAJ (Malayan), "for his guidance of a multi-racial society toward communal alliance and national identity."

INTERNATIONAL UNDERSTANDING

Dr. Y. C. JAMES YEN (Chinese), "for sharing the wealth of his experience and creative leadership in rural reconstruction in Asia."

JOURNALISM AND LITERATURE

The Board of Trustees has elected to make no Journalism and Literature Award this year.

HENRY TRISTRAM HOLLAND

(1875-1965)

and

RONALD HOLLAND

(1914-)

Sir Henry Tristram Holland and his son, Dr. Ronald Holland, British missionary doctors on Pakistan's North-West Frontier, are elected to the Award for Public Service, for selfless dedication of their renowned surgical skills to combat the blight of blindness in that remote hinterland.

In a Christian ministry of healing they and their colleagues have over the past 59 years restored sight to more than 150,000 tribespeople and otherwise relieved the suffering of thousands more to whom no other help was available. Giving succor not only through medicine and surgery but through an understanding human touch, they, in a manner characteristic of Ramon Mag-saysay, have cared for all people as individuals and believed in their dignity and importance.

Dr. Henry Holland came to India in 1900, joining the Anglican medical mission at Quetta, now in West Pakistan. It was a small, pioneer hospital in a bleak land of rugged mountains and parched plains where seasonal extremes of intense heat and bitter cold compelled the tribesmen to live a pastoral, nomadic existence.

Among the tribesmen were brigands and Muslim fanatics whose lives were given to blood feuds, but the doctor saw the courage and pathos of these independent people and determined to help them. A rigorous daily regimen of work and study enabled him to pass examinations in three languages—Urdu, Persian and Pushto—and master simple conversations in four other tongues.

From the first Quetta was an "eye" hospital. Glaring heat, searing winds, dust, flies, vitamin deficiency in the diet and

calcium-laden water made cataracts and eye infections endemic to the Baluchistan Frontier. Dysentery, malaria, tubercular glands and other ailments also were common.

Touched by the plight of the blind, the young medical graduate soon became an expert eye surgeon. As the hospital's and the doctor's reputation spread, a motley, "invasion" of patients began every spring and autumn as the nomads moved to and from their pastures. Swarthy Baluchi, wandering Brahui, and tall marauding Pathans waited their turn for treatment with Sindhis and Punjabis who had come up from the plains. Treatment was free for the poor, a pittance was charged those who could afford to pay a little and even for the well-to-do the cost was nominal.

Ten years later Dr. Holland extended his work to Shikarpur in North Sind, starting an eye clinic that today is one of the largest in the world. Though thousands were treated during the crowded winter weeks there and during the spring and autumn at Quetta, the doctor still thought of the mass of unrelieved suffering out in the district. He made long and perilous journeys to encampments of tribesmen to patch up wounds and even perform delicate eye operations. Quetta, meanwhile, was growing under his stewardship into a well-established, well-equipped medical and surgical center with a training school for nurses.

For the Hollands medical service has since become a family tradition. Two sons, Harry and Ronald, after completing medical training in Great Britain, joined their father. Harry now is continuing mission work in England among lay Christians going abroad. Ronald has taken over from his father in Pakistan and has become the outstanding ophthalmic surgeon of the three. Like his mother, Ronald's wife is a nurse, serving as an expert anesthetist and keeping hospital accounts although confined by paralytic polio to a wheelchair.

The son has followed the father's example in learning languages, operating from early morning until nightfall, and answering emergency calls day or night. Across the Baluchistan wastelands during slack periods he travels motor scooter or land rover where his father moved by pony or by camel to bring relief to penniless nomads.

Father and son have made significant contributions to medical science. Shikarpur has become a meeting place for eye specialists from around the world where some 150 surgeons since 1920 have come to visit, work and learn. Up to 3,000 operations of which 1,400 were for cataracts, have been performed there during the crowded two-month period of winter when Dr. Ronald Holland comes down from Quetta. Operating under severe handicaps, over the years the Hollands have achieved a 97 per cent success with their eye surgery. Their methods for mass operative treatment are now widely studied by surgeons abroad.

Dr. Ronald Holland, like his father, has not been tempted from his chosen work in Pakistan by attractive professional offers elsewhere. Imbued with a deep Christian humility, the Hollands still welcome to their hospitals all who come regardless of faith. But the love that is at the core of their sense of public service goes out to all.

TUNKU ABDUL RAHMAN PUTRA AL-HAJ

(1902-)

Tunku Abdul Rahman Putra Al-Haj, Prime Minister of the Federation of Malaya, has been named to the Award for Community Leadership, in recognition of his guidance of a multi-racial society, through Malaya's constitutional struggle for independence and toward communal alliance and national identity.

Emerging as a symbol of racial accord, he has brought Malay, Chinese, Indian and other communities of this new nation into a working partnership based on mutual rights and responsibilities.

Born a seventh son of the Sultan of Kedah, little in pleasurable years of schooling and a government career in his father's states suggested he would one day become a nation-builder and "Bapa Merdeka," or Father of Malayan Independence. Leadership was suddenly thrust upon him in 1951 at the age of 48. Close friends who had sensed political acumen and observed his ability to find common ground regardless of color or calling, asked him to assume a task no prominent politician wanted. He became president of the United Malays National Organization then verging on fragmentation over extending equal membership rights to all races.

Malaya was beset with divisive factions. Eleven states, some feudal and some modern, held Southeast Asia's least homogenous mixture of races, religions, languages and cultural groups. Roughly 50 per cent Malays, 37 per cent Chinese, 11 per cent Indians, Pakistanis and Ceylonese and two per cent miscellaneous, each community in itself was a composite. Muslims, Buddhists and Hindus spoke different dialects and held to their ancestral customs. Most at odds were the Malays, sometimes arrogant in protection of their birthright, and Chinese, who it was feared might employ their economic and educational superiority to gain political control. A Communist-led insurrection compounded these differences.

Abdul Rahman and other foresighted leaders determined to avoid violent upheavals comparable to Indonesia's war for independence and the communal strife forcing India's partition. They resolved that independence must be achieved by constitutional means, agreed on the absolute necessity for inter-racial cooperation and chose to promote a new "Malayan" citizenship.

Meeting supporters and adversaries alike in a genial, forthright manner that was highly persuasive, the Tunku first clarified the issues and reformed the UMNO. With considerable generosity, tact and firm common sense, he then forced an alliance with the Malayan Chinese Association and the Malayan Indian Congress which won a sweeping victory at the polls in 1955. The nine hereditary Malay rulers next were convinced they could retain their rights and privileges with independence. These evidences of political viability induced Great Britain to grant independence on August 31, 1957, and Tunku Abdul Rahman became Malaya's first Prime Minister.

Re-elected in 1959, he announced his chief purpose for the next five years would be cementing national unity. In election campaigning from city to kampong, he has pleaded, persuaded and sold his ideas of communal harmony. Keenly conscious of his people's needs, he has made rural development a major function of a government notable for its integrity.

In July, 1960 the emergency declared 12 years earlier was officially ended. An offer of amnesty had failed when the Tunku refused to give insurgents status by recognizing the Malayan Communist Party. Some guerrillas remain in the jungle, but independence, a flourishing economy with one of the highest per capita incomes in Asia and communal cooperation have curbed rebel appeal.

With wit and candor the Tunku has avoided political platitudes. Instead of making a scapegoat of the British, he credits them with bequeathing Malaya an efficient civil right and justice before the law. Championing workable and moderate policies, he has restrained ultra-nationalistic Malay agitation and impressed on the Chinese and others that Malaya must exist for them as more than a pleasant and profitable place to settle.

His labors, like Ramon Magsaysay's, were aimed to build a nation where man could live with man in honor and peace. Exuding a spirit of "live and let live," he has fostered in Malaya an understanding rare in newly independent countries that the future is best insured with tolerance and goodwill among ones fellowmen.

Y. C. JAMES YEN

(1893-)

Dr. Y. C. James Yen, Chinese founder of the Mass Education Movement and rural development pioneer in Asia, is elected to the Award for International Understanding, for sharing the wealth of his experience and creative leadership in rural reconstruction and bringing to the East and West an awareness of the urgency for meeting the aspirations of the Asian farmer for a fuller life.

The Award Foundation particularly commends Dr. Yen's continuing concern for the whole man and molding his social institutions, rather than simply refashioning his physical environment.

It was in France during the First World War, when James Yen was besieged by Chinese coolies seeking help in writing to their families at home, that he came face to face with the tragedy of illiteracy among his own people. Returning to China in 1920, he began a career dedicated to educating rural people and the long, painful process of re-educating the educated to share in this task. Through the years, from one project to another, from one experiment to the next, from one disheartening disappointment to another lesson learned, he labored, sometimes alone, in his quest for ways to help simple farm folk find themselves.

The endeavors to which James Yen gave himself are milestones on the path to coping effectively with Asia's age-old problems of ignorance, poverty, official abuse and the lack of faith in their own resources among ordinary citizens. The "Ting Hsien experiment" in North China was the first of its kind to bring scholars to live and work with the people. To this the wartime and post-war community developments in West China's Szechuan Province were worthy successors.

The Joint Commission on Rural Reconstruction, launched on the mainland of China in 1948 and responsible over the past decade for Taiwan's peaceful and effective rural revolution, was

inspired in large measure by Dr. Yen. UNESCO's Fundamental Education Movement in Southeast Asia has drawn much from his program.

In order that 30 years experience in China might be made helpful to other developing countries, James Yen joined in 1951 with friends in the United States to organize the International Mass Education Movement. After searching through Asia, Africa and Latin America, Dr. Yen chose the Philippines as a site where these lessons might be applied and an international center could be established to train rural leaders who would carry forward this pioneering work. A result is the Philippine Rural Reconstruction Movement which has begun to make a significant impression on life in the barrios it has reached. Stimulated in part by this private effort, the Presidential Assistant on Community Development, World Neighbors, Inc. and other groups now are seeking to bring positive change to the rural areas.

Dr. Yen's lifetime devotion to the cause he chose and the extra-ordinary talents cultivated to the furtherance of this effort give expression to the ideals and spirit of service exemplified by Ramon Magsaysay. Born into a family of scholars, he has yet remained humble and at ease with the simplest of the rural folk whose lot he has sought to improve. These qualities have been translated into faith and purpose by those who have worked with him.

At all levels, from chiefs of state, legislators, administrators, businessmen, field workers and down to village people, James Yen has spread the seeds of his mass education ideas to Asian countries. He has become a citizen of the world, who, by his works, gives substance to the dream that one day human beings everywhere may freely enjoy security, equal opportunity and a sense of international brotherhood.

1961

GOVERNMENT SERVICE

RADEN KODIJAT (Indonesian), "for directing the yaws campaign bringing far-reaching humanitarian and economic benefits to his people."

PUBLIC SERVICE

NILAWAN PINTONG (Thai), "for voluntary participation and leadership in development of effective civic action."

COMMUNITY LEADERSHIP

GUS BORGEEST (British), "for his example of human concern and courage on 'Sunshine Island' in Hongkong."

INTERNATIONAL UNDERSTANDING

GENEVIEVE CAULFIELD (American), "for international citizenship and help to the blind in Asia."

JOURNALISM AND LITERATURE

AMITABHA CHOWDHURY (Indian), "for upholding high ethical standards of his profession as a guardian of the public conscience."

RADEN KODIJAT

(1890-1968)

Dr. Raden Kodijat, public health physician of Indonesia, has been elected to receive the Award for Government Service, for his dedicated and skillful direction of the massive yaws, eradication efforts that has freed millions of his countrymen from a disfiguring and crippling disease.

Some 55 million Indonesians, or nearly two out of every three residents of the Archipelago, have been reached by this campaign over the past ten years—many with repeated examinations and more than half of the estimated 12 million cases of yaws have been cured. It is a measure of Dr. Kodijat's grasp of the problem and determination that he developed a campaign which is overcoming Indonesia's shortage of trained doctors and reaching patients living on some 3,000 islands extending over a 3,000-mile-arc of the moist tropics where this disease is most prevalent. Midst all the difficulties facing a newly independent nation and in harmony with local needs he has built an effective organization, starting with three doctors and 45 assistants and now numbering about 2,000 workers whose target date is 1970 for eliminating yaws in Indonesia.

Entering the public health service in 1914, Dr. Kodijat long fought this scourge of the rural areas where, in many villages of Java, the raspberry-like ulcers of yaws were so common as to be considered a part of growing up. Caused by a spirochete much like that of syphilis but not venereal, it had spread mostly among children. Throughout the islands, Dr. Kodijat has watched yaws begin with a small skin eruption, corrode the flesh and finally attack the bones. He had seen clinics filled with patients taking the effective but tedious arsenical treatment and knew that only a fraction of the yaws victims were being reached.

Seeking an approach that would not only cure but also reduce the incidence of contagious recurrence of the disease, he conducted at Kederi in 1934 the first experiment in treating an

entire local population group until the symptoms of infection had disappeared. With the discovery of penicillin treatment, broad extension of his approach could be considered. It became possible when the new Republic's request for assistance in a country-wide attack was met by the United Nations International Children's Fund and the World Health Organization which have provided penicillin, vehicles, medical supplies and technical assistance.

In conducting the campaign, Dr. Kodijat insisted, as he had throughout his long career, upon investigating every aspect of the problem in order to utilize most efficiently the workers and equipment available. Accepting no methods used elsewhere without examination and then depending on careful experimentation, he evolved a program uniquely suited to Indonesia of thorough survey of each community, followed by treatment and re-examination in repeated cycles.

Except in villages where the incidence of disease is above 30 per cent or revisits are impractical, Dr. Kodijat's organization employs "selective" rather than "total" mass treatment. Initial examinations are made by *djurupateks* who have completed at least the seventh grade and three months of special training in identifying yaws. They are followed by *mantris*, or male nurses, who administer the injections and make follow-up examinations. Cost of the program was greatly reduced after exhaustive testing proved that four cc of penicillin was as effective as the eight cc used elsewhere.

Dr. Kodijat had reached a normal retirement age when he was asked in 1950 to organize and direct a national yaws control program that since has become larger than the total of all other such efforts in the world. Knowing the enormity of the task ahead it is akin to the spirit of Ramon Magsaysay that he accepted without hesitation this call to the service of his people.

Now 71 years old, he continues quietly but firmly to steer the yaws program in Indonesia. Holding concern for the health of his people above his own, even an attack of pneumonia in 1959 did not deter this devoted doctor from managing a campaign of far-reaching humanitarian and economic consequences through its crucial years.

NILAWAN PINTONG

(1916-)

Nilawan Pintong, Thai civic leader and editor, has been elected to receive the Award for Public Service, for responsible volunteer participation and leadership in development of constructive civic programs that have given women a new and creative role in Thailand.

Prepared to become a teacher she instead joined the official department of publicity to help educate the Thai people about their own instruments of government. As chief of official publications and later while managing the foreign press section, she developed a strong interest in journalism. Through participation in Thailand's emerging civic and community movements she discovered that there was a great need and opportunity for women to leave their seclusion and join in this work.

With a sense of this mission she left the security of government civil service to organize a magazine that would encourage Thailand's women to become more responsible citizen. From this beginning grew two other magazines—one for youth and a news weekly—and radio programs to generate a broader awareness of these ideas.

As her magazines led her into new areas of community concern, she developed a philosophy on the role of initiative by private citizens in Thailand's system of constitutional monarchy. Through association with printers, librarians and writers she fostered attention to these ideas. Determined to insure fuller participation by women, she began working on problems of mental health, education for girls, training for the blind and organized programs enabling Thais in depressed areas to help themselves. A democrat and a devout Buddhist, she encouraged young Buddhist study groups on government and international affairs, while herself serving on the UNESCO and other international committees. A unique contribution has been her Ounakorn Center, furnishing hospitality for foreign visitors, especially writers and educators.

It also provides headquarters for the World University Service, PEN, the Thai Foundation for Journalism Education and the National Council of Women of Thailand. Here they meet in a friendly, cooperative atmosphere.

Possessed of an innate sense of organization she has saved many of these groups from pitfalls besetting private associations. Soft-spoken but direct, she is objective and fearless in voicing her views and withal a diplomat. She is rarely president or chairman, but typically is found serving as executive secretary without pay and insuring performance. She shuns publicity, is seldom photographed, and yet her competence, dependability and sound common sense are recognized by persons from all walks of life who seek her services and advice.

Although she comes from humble, rural origins and lacks personal wealth, she has given unsparingly of her energy to efforts she finds worthwhile. And, so that she may have more time to give she has moved out of her home and now lives in a small room next to her office. Such dedication has nurtured in others a willingness to serve. It is in such quiet, selfless work that the ideals of Ramon Magsaysay find heartening expression.

GUS BORGEEST

(1909-)

Gus Borgeest, originator of Sunshine Island for refugees, in Hongkong, has been named to the Award for Community Leadership, for establishing a model for rural resettlement and rehabilitation of refugees that enhances their self-respect and productive capabilities.

Born in Shanghai and a production expediter in a textile factory there for 20 years, Borgeest and his Chinese wife, Mona, joined the trek from Communism in 1951, landing in Hongkong with only HK\$2 (the equivalent of 34 U.S. cents) in their pockets. He was fortunate in soon finding employment in the Hongkong Government's Vegetable Marketing Organization and Social Welfare Office; for many of the thousands of families then crowding into the Colony from the mainland there was little more in store than a food dole and living in squalid shacks while waiting for space in refugee housing the Government was beginning to construct.

Borgeest recently had joined the Society of Friends and found here a test of his newly-adopted Quaker philosophy: "My neighbor is my business." A regular visitor to the refugee squatters' camps, he became convinced that "welfare, with best intentions, was subtly enslaving them, as handouts always do." He determined to find a self-help route to rehabilitation that would be economically sound and also would restore human dignity.

No good land was available, but after much searching Borgeest discovered Chau Chung Island—200 rock-strewn acres so barren no one cared to live there. Government leased him the Island for HK\$180 (about US\$34) annually, doubting that "anything but failure" could come of his venture.

Using savings of two frugal years as a Government employee to buy tents, cots, a few tools and a week's supply of food, Borgeest,

his wife, their adopted daughter and two refugee farmers transported themselves by rented sampan to the Island in mid-1953. After a first fearful night of rain and wind, Borgeest renamed it "Sunshine Island" to augur a better future. The first grass huts and tediously planted gardens were ripped out by a typhoon, but by year-end a second crop of vegetables was growing as was the small population of goats, rabbits and geese. And the first financial crisis had been weathered with the help of an interest-free loan from a friend and Borgeest's acceptance of a temporary job in Hongkong to support the struggling settlement.

From such modest beginnings grew the "Sunshine Island" that today is accepting a steady stream of refugees who are taught the skills of resourceful self-support and "graduated" with modest savings to pioneer on Government-assigned plots on other marginal land in the Colony or to enter the construction industry. Once Borgeest had proven the practicality of this enterprise other groups joined in the effort. Students from refugee colleges and Royal Air Force men volunteered to dig fish ponds, irrigation ditches and reservoirs. The Agriculture Department has given valuable advice on farming and piggery and the Forestry Department planted 20 acres with trees. Tinned food, milk and cash have come from religious groups, CARE and private donors. Social welfare agencies now select and sponsor refugee families for training with Borgeest.

With each passing year there has been progress. Some 800 fruit trees now are growing with cash crops interplanted and pig raising has become the mainstay of the Island's economy. But more consequential than the new stone houses replacing the thatched cottages is the example of human concern and courage that has become the trademark of "Sunshine Island." Like Ramon Magsaysay, Borgeest not only has believed in service, he has acted upon that belief.

GENEVIEVE CAULFIELD

(1888-)

Genevieve Caulfield, American teacher and friend of the blind in Asia, has been named the Awardee for International Understanding, in recognition of her international citizenship in guiding to full and useful lives those in other lands afflicted like herself by blindness.

For 38 years she has befriended the blind, first in Japan, then in Thailand and now in Vietnam, giving inspiration from the deep conviction of man's brotherhood and the "kingdom within" which led her to this work. To her, as to Ramon Magsaysay, regard for the dignity and importance of every individual has been a rule of conduct.

Blind from early childhood she was taught to live like other people, to be independent and to contribute something to the world instead of asking it to take care of her. Courage instilled by her mother and knowledge gained from voluminous reading aloud by relatives and friends plus good schooling enabled her to accept this handicap and live constructively. Many other sightless persons, she knew, had not been so fortunate.

From an example of prejudice engendered by ignorance of another people's way of life, grew an intense curiosity about Japan and the decision to serve a two-fold purpose; she would contribute to international understanding by learning to know another people while helping their blind as she had been helped.

She trained herself assiduously. To qualify as a teacher, she was the first blind student to enroll at Columbia Teacher's College. To test her ability to move about alone and manage a regular job, she took a traveling assignment with a state commission for the blind. She did practice teaching at her former school and later tutored private students in English.

Her sincerity and persistence prevailed over the countless obstacles that would have daunted a less determined voyager and

in 1923 she sailed for Japan. She lived with Japanese families, conformed to their customs and learned their language. Supporting herself by teaching English, she also helped blind patients learn to read Braille. A brief return was made to the United States, to share what she had learned of Japan on lecture tours and study new techniques for teaching the blind.

Visiting Bangkok in 1936 to study possibilities for establishing a school for the blind, she learned the blind were considered useless and vowed to help them. Through radio talks, newspaper interviews and numerous public appearances she demonstrated what a trained blind person could do. After many personal interviews with officials, she surmounted the difficulties and in 1938 opened the school for the sightless. Remaining in Thailand throughout the war, she kept classes going even when air raids necessitated movement twice to temporary rural quarters.

Returning to Japan in 1947 for five years, she taught English and labored to improve opportunities for the adult blind and others who were handicapped. Throughout her dedicated career she has earned entirely her own support. And another lecture tour of the United States was followed by a 1952 return to her beloved school in Thailand to train her pupils vocationally and help them find work.

In 1956 her dedicated efforts prompted an invitation from the President to establish a program for training the blind in Vietnam. Two years later this resulted in the opening of a small elementary school for the sightless in Saigon.

Now a commuter between Japan, Thailand and Vietnam, this blind but valiant woman has brought love and understanding to the people whose lives she has touched. At 73, she continues to teach English and work with the blind, quietly studying the people among whom she resides so that she may more effectively transmit an understanding of them to other Asians and her own countrymen.

AMITABHA CHOWDHURY

(1927-)

Amitabha Chowdhury, Assistant Editor of *Jugantar*, the influential vernacular daily newspaper of Calcutta, has been elected to receive the Award for Journalism and Literature, for scrupulous and probing investigative reporting in protection of individual rights and community interests.

An Indian pioneer in the use of this journalistic skill, his reporting, like Ramon Magsaysay's service to the Filipino people, bespeaks a deep concern for human welfare. With uncompromising integrity and rare boldness he has upheld high ethical standards for his profession as a guardian of the public conscience.

Joining *Jugantar* in 1948 as a young, idealistic university graduate, his first assignment was to report on the persons displaced by the partition that created independent India and Pakistan. To this encounter with the pathos of over four million refugees streaming into Bengal he traces his crusading spirit and awareness of human problems. His serialized features introduced a new style of writing in the Bengali press and established *Jugantar*, one of the Amrita Bazar Patrika group of publications, as champion of the refugee's cause.

As Parliamentary Reporter he next turned his inquisitive pen to chronicling the actions of officials and political forces influencing them. During the first years of independence, government expanded rapidly while also losing through retirement a generation of experienced administrators. Burgeoning government bureaus, corruption, inflation and the loss of pride in official integrity all were portrayed with concern for the cause as well as the fact. He was dismayed to find that Indian press, reared on a tradition of protest against foreign rule, was largely apathetic to the real story of how and why many of the country's leaders were losing sight of their former ideals.

Promoted in June, 1956 to assistant editor, Amitabha Chowdhury took up the challenge in a weekly column, "Nepathya Darshan" (Scenes Behind the Curtain). Here he gave angry and dissatisfied Bengali intellectuals and poor men alike their first effective means to voice legitimate grievances. Instilling hope in an atmosphere of deepening frustration and also increasing *Jugantar's* circulation, the column exposed over 250 documented abuses of power in high levels of government. The result was the dismissal, demotion or initiation of legal action against some 50 delinquent officials. The column also aroused constructive public debate of social maladies by its examination in depth of causes and possible remedies.

"The modern Indian intellectual, whatever may be the superficial signs of his behavior, lives in the midst of his traditional institutions," says Chowdhury. "He is the heir of a profoundly ethical social system and a philosophical culture. Not only is honesty . . . respected in this society, but any important personality whether he is in politics or whether he is an official is basically judged by these traditions of self-sacrifice and the urge he shows for sincere public service. It is to this deeply imbedded tradition that our new journalism wants to respond."

1962

GOVERNMENT SERVICE

FRANCISCA REYES AQUINO (Filipino), "for original research, preserving for Filipinos their heritage of folk dance and music."

PUBLIC SERVICE

LAWRENCE and HORACE KADOORIE (both British), "for their practical philanthropy to promote rural welfare."

COMMUNITY LEADERSHIP

PALAYIL PATHAZAPURAYIL NARAYANAN (Indian-born Malayan) and H. KOESNA POERADIREDDJA (Indonesian), "for their championship of the workers cause through responsible and free trade unionism."

INTERNATIONAL UNDERSTANDING

MOTHER TERESA, M.C. (Yugoslav-born Indian), "for her merciful cognizance of the abject poor of a foreign land."

JOURNALISM AND LITERATURE

CHANG CHUN-HA (Korean), "for editorial integrity in a non-partisan forum encouraging creative intellectual discourse."

FRANCISCA REYES AQUINO

(1899-)

Francisca Reyes Aquino, teacher and custodian of Filipino traditional culture, has been elected to receive the Award for Government Service, for her original research on Filipino folk dance and music, preserving this rich heritage for future generations.

As a young school teacher Mrs. Aquino pioneered in recording the native songs and dances handed down through generations by the numerous ethnic groups that today compose the citizenry of the Philippine Republic. It was a time when these forms of ritual and entertainment were threatened with extinction by the introduction of mass communications.

Through sustained and enthusiastic efforts of 40 years she has helped instill in her countrymen a growing appreciation of the artistic expression that is uniquely theirs. Her research has been drawn upon by physical education and dance instructors throughout the Republic. Legions of children and adults at home and abroad have known the joy of benefiting from her works. Her accumulated learning expressed through continued instruction and writing has facilitated a creative national expression of Filipino culture.

Mrs. Aquino began her career as student assistant in physical education at the University of the Philippines in 1921. Pursuing graduate studies in her chosen field she traveled to remote mountain barrios and outlying islands, befriending the people and learning their unrecorded lore. Her meticulous research was published first in a thesis on Philippine folk dances and games for use in schools. With encouragement from the University this work was expanded after 1927 when President Jorge Bocobo gave his official support.

After serving 18 years on the faculty of the University and rising to become Physical Director for Women, she transferred

to the Department of Education. There, since 1955, she has been Superintendent of Physical Education. As work permitted, she also has taught in several private colleges and universities and shared her knowledge of traditional Filipino performing arts with others at numerous international conferences.

The Philippine Folk Dance Society, which she founded, has fostered the development and teaching of this delightfully expressive form. The author of widely circulated books and articles, she has encouraged others to seek for inspiration at home. The several Filipino dance troupes that now are winning critical and popular acclaim in Europe, the Americas, Asia and the Middle East have built upon a foundation to which she made an initial and vital contribution.

Now 63 and a grandmother, Mrs. Aquino continues active in her professional specialty to the fullest of her time and energy. Working to give her people a sense of confidence, pleasure and pride in their artistic inheritance, she has shown what one person can do who is moved by a patient, determined concern for discovering the value in much that lies unused, yet readily at hand.

LAWRENCE and HORACE KADOORIE

(1899-) (1902-)

Lawrence and Horace Kadoorie, founders and benefactors of the Kadoorie Agricultural Aid Association, in Hongkong, were named to receive the Award for Public Service, for their practical philanthropy working in partnership with Government, refugees and struggling cultivators to promote rural welfare in the Colony of Hongkong.

Following political change on the China mainland in 1949, inpouring refugees to Hongkong eventually were to number over one and a half million, more than doubling the population of the Colony with an area of 400 square miles of which only one-eighth was arable. As industrial financiers, the Kadoorie brothers contributed to the upsurge of manufacturing and construction which provided employment for an increasing number of skilled workers and laborers. Farmers, farm laborers, and older folk unable to compete in urban work, they recognized as a special problem.

In consultation with Government, an agricultural extension venture combining the knowledge and facilities of official agencies and funds from the Kadoories was decided upon. In September 1951 the Kadoorie Agricultural Aid Association was established to assist the very poor who sought to make their living from farming and livestock raising.

Since then the Kadoorie brothers have contributed more than HK\$16 million (approximately US\$2.8 million) to this experiment plus their own time and quiet encouragement. Working in cooperation with Government this provided the means for making productive some 75,000 families in 1,107 villages in the New Territories of the Colony of Hongkong.

Assistance given to struggling farmers is distinctive in being practical, prompt and flexible, and in sufficient amounts to be effective. The K.A.A.A. began by giving new settlements of refugees enough stock to establish them as pig or chicken raisers. Interest free loans enabled villagers to erect their own simple sties

and buy feed. When these were repaid and land was available, farmers were helped with larger interest free loans to construct small irrigation systems for growing vegetables, permitting gains from use of waste vegetables as pig feed and pig manure in compost fertilizer for garden plots.

A second livestock plan was built around poor widows of farmers in the New Territories. Hundreds of draft animals were given to those who could use them. A widow choosing pigs received two pregnant sows or three gilts and three porkers. Widows too old to manage livestock received two cocks and 18 hens. Their only obligations were to repay the interest free loans for feed at prescribed times, follow the technical advice of government agriculturalists and report any outbreak of animal disease. Other farmers raising for markets an improved strain of Pekin ducks or a cross between New Hampshire and Wai Chow chickens developed at the K.A.A.A. experimental farm could increase their annual income by 33 per cent.

Almost every phase of farming in the Colony has benefited from this cooperation between the Kadoorie brothers and Government. Villagers have been helped to use modern agricultural aids, such as insecticides and artificial fertilizers. Some 200,000 bags of cement were distributed to farmers for building access roads, sea walls, threshing floors, drainage ditches and other local public works. Jointly with Government, the brothers established in August 1955 the Kadoorie Agricultural Aid (Loan) Fund, now capitalized at HK\$1,250,000. Interest free loans normally not exceeding HK\$2,000 are made for all productive farm purposes; after the first four and one half years of operation of the 13,399 loans made 10,027 had been repaid in full.

The generosity and efforts of the Kadoorie brothers have enabled government specialists to achieve an exceptional effectiveness in helping farmers in the Colony become productive and self-supporting. The results are evident in a marked increase in food for the burgeoning population. Equally vital is the new sense of self-reliance this is giving to both refugees and poor farmers afforded the opportunity to become creative members of their community.

H. KOESNA POERADIREDDJA

(1911-)

and

PALAYIL PATHAZAPURAYIL NARAYANAN

(1923-)

Two labor leaders, H. Koesna Poeradiredja of Indonesia and Palayil Pathazapurayil Narayanan of Malaya, have been chosen the Awardees for Community Leadership, in recognition of their championship of the workers' cause through vigorous advancement of responsible and free trade unionism. In their respective countries these two labor leaders have shown that organizations of workers also can enrich community living.

Mr. Koesna's consuming dedication is improvement of the lives of railway workers. Alliances between labor and political parties forged during the struggle for Indonesian independence later thwarted emergence of unions as instruments of effective economic action. Alarmed by the plight of railwaymen who came to seek his help, Mr. Koesna accepted the challenge of leading them in a free trade union that would deal with vocational problems. This decision taken in May, thirteen years ago has earned from the men he has served the title "Father of the Railway Workers Union of Indonesia."

Supplementing a talent for organization tested before World War II when he put together a consequential program for Indonesian students, Mr. Koesna read extensively on trade unionism. Neglecting family and law practice, he then for three years traveled the far-flung Indonesian archipelago to discuss with railway workers the possibilities for them in a good labor organization. From these beginnings grew the progressive and well-administered Persatuan Buruh Kerata Api (PBKA).

Adapting to Indonesian needs some methods used successfully by American and European unions whose work he admired, the

PBKA is solidly founded on monthly dues of members. Railway workers now help themselves and one another through such joint enterprises as an accident insurance program for members and their families, a savings and loan bank, a housing loan fund and a hospital. Offsetting a faster increase in prices than wages are rice mills, a clothing and shoe factory and a soap manufacturing plant which provide prime need commodities at low cost and augment workers' incomes by employing other family members. Strict management of union funds permitted savings that financed construction of a modern four-story headquarters in Bandung.

Convinced that society should see to the welfare of the common man, Mr. Koesna nevertheless insists that people must work to better themselves. Through the years he has remained humble but firm: "I give the workers what they want, not only what I think is best for them. PBKA has no political bone to chew and no specific political party to support."

A common battle was being waged in Malaya by P. P. Narayanan, an immigrant from South India at the age of fourteen. Inspired by Malaya as a land of opportunity, hard labor in a tin mine as an impressionable 19-year old nurtured in him an intense desire to help workers share in the promising future. As he came to know rubber plantation workers, handicapped as producers and citizens by their neglect, his determination grew. Starting with a group of ten men at Seremban in 1946, he formed the nucleus that ultimately became the National Union of Plantation Workers (NUWP) of Malaya. With a strength of 180,000 members it is the largest and richest in the Federation.

Mr. Narayanan began his undertaking in a period of insurgency when both managers and many estate workers held the common belief that trade unionists were professional trouble-makers and union membership meant sympathizing with the terrorists. He had not only to win with employers the case for labor's legitimate aspirations but also prove to labor the benefits of organization.

Plantation workers measure the consequences of this effort today in a wage scale that is four times higher than the Union was established. Medical care for workers and their families,

improved housing to meet new government standards, education for children and a respect for labor as an essential part of the community have become common features on Malayan plantations.

NUPW today is esteemed both by men who sit across the bargaining table and abroad as a model of organized labor. The NUPW publishes the only labor paper in Malaya in Malay, Tamil and Chinese. Plantation House, a fine assembly building in Kuala Lumpur, stands a symbol of dignity in labor. With strength in depth through second and third level officers trained in union management, NUPW leaders have traveled to share their experience with similar groups in other developing countries.

To P. P. Narayanan the job is just begun: "Trade unionism has become part of Malayan society. We must continue to show that a concerted effort of members of all nationalities, both employer and employee, can achieve a great future for Malaya."

MOTHER TERESA, M. C.

(1910-)

Mother Teresa, founder of the Missionaries of Charity in Calcutta, India, has been named the Awardee for International Understanding, for her merciful cognizance of the abject poor of a foreign land, in whose service she had led a new congregation.

A Loreto nun at the age of 18, Mother Teresa was sent from her native Yugoslavia on January 6, 1929 to teach at St. Mary's High School in Calcutta, India. Deeply moved by the human tragedies enacted daily in the slums surrounding the school, she longed to be more than an onlooker. But for twenty years she fulfilled her obligations to the Loreto Community as a teacher before her petition to work with the people of the slums at last was granted.

In 1948 with the permission of Pope Pius XII she founded the Missionaries of Charity, devoted entirely to the poor. By then conversant in Hindi, Bengali and English, she assumed Indian citizenship and chose for the new Indian congregation a habit suited to its mission and locale—a simple, white cotton sari edged with blue.

Quartered in a cramped room in Calcutta's slums with a handful of Indian nuns she had trained, Mother Teresa and her small band began their work with clinics and feeding centers. As police and others began to bring to her doorstep starving and diseased children and adults left to die on the streets, she determined that these unwanted must have a place to spend their last days in peace.

Since 1952 at the gates of the Temple of Kali in an ancient, teeming quarter of the city a unique hospital has welcomed dying destitutes. Filling a need Calcutta's already overburdened hospitals could not meet, Nirmal Hriday, or Pure Heart, accepts only those about to die. With care given some recover and

frequently return to help as volunteers, but most succumb to the relentless effects of a lifetime of undernourishment and disease.

For cast-off slum children—the lame, the blind and the tubercular—the Missionaries of Charity run a second home, Sishu Bhavan. At six clinics, one equipped with a TB chest apparatus, an average of 49,000 patients too poor to afford medical attention are treated annually with the assistance of volunteer doctors. Through 52 relief centers around the City food, milk and clothing the Missionaries have collected are given to the needy.

A mobile clinic manned by Sisters trained in the leprosy department of the Hospital for Tropical Diseases treats weekly at eight centers some 4,200 lepers; a dispensary at Sishu Bhavan administers to another 500. In Delhi eight Sisters run a combined orphanage and home for retarded children and make weekly visits with a second mobile unit to a leper station to distribute medicine and flour.

Education is not neglected; in the poorest districts of Calcutta, under the trees or a matting roof, the Sisters conduct 13 primary day schools where some 3,000 children are taught to read and write in Hindi and to do simple sums. Promising students are encouraged to attend special classes in English, carpentry, sewing or shorthand and typing.

Mother Teresa's small community now numbers over a hundred. Most are Indians, excepting ten from Pakistan, Nepal, Malta, Albania, Yugoslavia, Germany, England and the United States. Living as austere as their slum neighbors, the Missionaries of Charity depend upon donations and on a special Flag Day the public is invited to assist the work among the lepers. They work in pairs daily bringing children to school; scouting the slums for the dying and administering to the sick and the hungry. Moving chiefly among Hindus and Moslems, they make no attempts at conversion, but treat alike men of all castes, creeds and color concerned solely with injecting dignity into the lives of the unfortunate.

CHANG CHUN-HA

(1919-)

Chang Chun-Ha, publisher of the Korean monthly magazine, *Sasangge*, has been elected to receive the Award for Journalism and Literature, for editorial integrity in publication of a non-partisan forum to encourage dynamic participation by intellectuals in national reconstruction.

Amidst the catalysmic events that have buffeted Korea during the past decade, Chang has devoted himself to mobilizing the ideas that are fundamental to democratic progress. His vehicle has been *Sasangge* or "The World of Thought." This magazine was born in the refugee-glutted seaport of Pusan in April 1953. Its purpose was not profit nor political power, but the enlightenment of a new generation of Koreans so that they might "discover the way" to building a freer society in harmony with their national traditions.

Sasangge has focused upon providing creative and stimulating reading for students and their professors; they held both the promise of future leadership and afforded the opportunity for new competence in exploring national problems in the Korean language after 35 years of Japanese occupation and education. While concerning itself with the needs of Korea, *Sasangge* is international in its horizons and aims also to give readers the best of relevant articles on current events, literature and the arts published abroad. In pursuing this goal, this magazine has enriched the "universe of discourse" within Korean society while lending encouragement to those concerned with enhancing the areas of independent thought and effort.

This monthly magazine of 400 or more pages is planned by an editorial board composed of 17 leading professors, lawyers and writers. The 21 staff members, most of whom are young Koreans educated after World War II, do extensive research in preparation of each issue. Novelists and poets who have been introduced

through the pages of *Sasangge* have contributed significantly to the new Korean literary movement that marks a national awakening.

Although *Sasangge* is the product of effort by many talented Koreans, Chang Chun-ha's role has been crucial. During times of political uncertainty and pressure for official conformity he has quietly and firmly worked to insure for the magazine an independence of expression and tolerance of competing views. In the process, the magazine has repeatedly sacrificed prosperity and easy popularity. While admitting that he is not always practical in a business sense, Chang sets an example of simplicity in his personal life that is the price of an easy conscience in an unsettled era.

The progress of a people is measured more in the thoughts that move them than by their material accomplishments. In emphasizing in Korean life a concern for the individual and his nourishment of mind, *Sasangge* and its publisher have made a unique contribution, indicative of the potential in journalism and literature to become a power for the public good.

1963

GOVERNMENT SERVICE

AKHTER HAMEED KHAN (Pakistani), "for inspiring personal commitment to developing a viable pattern for rural reform in East Pakistan."

PUBLIC SERVICE

HELEN KIM (Korean), "for indomitable leadership in emancipation and education of Korean women and sustained participation in civic affairs."

COMMUNITY LEADERSHIP

DARA N. KHURODY, TRIBHUVANDAS K. PATEL and VERGHESE KURIEN (Indians), "for creative coordination of government and private enterprise improving supply of an essential food and sanitation in a major city and living standards among village producers."

INTERNATIONAL UNDERSTANDING

U.S. PEACE CORPS VOLUNTEERS IN ASIA, "for voluntary service to the cause of peace and humanity in a direct and personal way."

JOURNALISM AND LITERATURE

The Board of Trustees has elected to make no Award for Journalism and Literature this year.

AKHTER HAMEED KHAN

(1914-)

Akhter Hameed Khan, Director of the Pakistan Academy for Village Development, in Comilla, Pakistan, is the Awardee for Government Service, for inspiring personal commitment of experience, erudition, and energy to scientific testing and application of a workable formula for rural development in East Pakistan.

Comilla Thana, or sub-district, like most of East Pakistan, is part of an alluvial plain beleaguered three months of the year by floods, another four months by severe drought and by sporadic cyclones, hail storms and tornadoes during the less than six months left for planting and harvesting. The 400 odd Comilla villages are dependent primarily upon agriculture, mainly paddy. In the last century, population increase has reduced average farms from five acres to one and one half acres, usually in separated fragments. Villages are isolated by floods and in the dry season by poor or no roads. Within villages, kinship groups are further isolated by feudal custom only recently being altered. Four out of every five persons are illiterate. Most villagers are deeply indebted to moneylenders charging interest rates equal to over one half of their crops. The result is withdrawal, each group thinking its hardships are distinctive and beyond hope of resolution.

Bringing change to this society was the challenge Akhter Hameed Khan accepted in becoming Director of the Comilla Academy for Rural Development, instituted by the Government of Pakistan in 1956 to train Government personnel at all levels concerned with rural development.

His own life has been a preparation for the Comilla experiment. An outstanding student and for a time a member of the elite Indian Civil Service, he had rejected the prestige of high position to become first a simple farmer and then a locksmith to understand better the meaning of one man's existence and

how to serve usefully whether in high or low estate. This intimate association with "the uncounted man," the village peasant, let Akhter Hameed Khan to stake his reputation on proving that this peasant could rise to lead himself.

In order that the faculty of Comilla Academy would not teach theory but practical methods he began a pilot experiment in nearby villages. The Government cooperated fully, in early 1960 granting permission for the Academy to use Comilla Thana as a laboratory for rural development. The Ford Foundation provided grants to finance the Academy operation, excepting local faculty, and to help with costs of the Cooperative Pilot Experiment.

Hameed Khan chose the cooperative approach based on individual freedom and personal initiative. Extension organizers were selected from each of several areas for training and then sent to their own and neighboring villages to encourage the organization of primary Societies. The three main principles were insistence upon group participation in all activities, injection of new ideas through a fellow farmer chosen as organizer and later by a similarly elected model farmer, and enforced savings.

Beginning with 25 societies in the first year the Academy was soon pressed by other groups wanting to join the experiment. In three years 150 primary village Societies have been organized and the number is increasing. All primary Societies have joined the Central Cooperative Federation which provides banking facilities, extends credit, a machinery service and repair center, and training in all phases of agriculture pertinent to the area. The organizer and model farmer elected by each Society come once weekly to the Academy for instruction and return to share what they have learned with villagers in the weekly meetings of the Society.

The first agricultural machines in Comilla Thana were pumps for dry season planting and tractors introduced cooperatively by the Academy through the Societies. Village operators were trained to "drive" and maintain this equipment, supported by the Cooperative Federation's machine shop. With debts being paid off and more savings, farmers are beginning to invest in

tubewells, dairy cows, cycle rickshaws and the like to further increase their incomes.

Improvements can be measured in agricultural production and creation of capital. The greatest gain, however, is in the active and responsible roles taken by villagers themselves with assistance of civil administrators.

Intensive training also was given to Government personnel at the Union, or village, and *thana* level. Their new approach gained at the Academy, coupled with emerging leadership and group action in villages, enabled the civil administration to carry out in the second year of the experiment extensive local public works. Designed by the Academy, the public works program gave the village and district councils of the Basic Democracies valuable official experience and employment during the slack season for villagers. It proved that extensive capital works can be undertaken in an agricultural economy without creating inflation by paying workers directly, half in cash and half in wheat. It further demonstrated that foreign aid can be related to a village so as to benefit the great bulk of the population.

The next priority is education of children and women through schools and youth and women's groups started recently.

Hameed Khan would have preferred a longer period of testing before applying the Comilla formula elsewhere but appreciating the Government's feeling of urgency has cautioned against Province-wide extension and argued in favor of a second phase of extension this year to three other *thanas*. His primary requisite has been that the effort in each instance must be centered around an educational institution oriented toward the rural areas. Training for personnel at all levels in the new *thana* developments is being given at Comilla Academy.

After evaluating the success achieved in three years in Comilla Thana the Government is staking its reputation on the conviction that Hameed Khan and his colleagues at Comilla Academy have developed a pattern whereby a breakthrough can be achieved in the rural society of East Pakistan.

HELEN KIM

(1899-)

Dr. Helen Kim, Korean educator and civic leader, has been elected to the Award for Public Service, for her indomitable role in the emancipation and education of Korean women and sustained participation in civic affairs.

Born at the turn of the century when Korean women were strictly secluded, Helen Kim's career has been intimately interwoven with their struggle for opportunities and expression. She was led to this concern as a student at Ewha Haktang. This first school to provide a modern education for Korean girls had been founded at Seoul in 1886 by American Methodist Missionaries with one student in attendance. By 1929 Ewha Haktang offered courses from kindergarten through college and has made a contribution to higher education for women unmatched in Korea.

Though Koreans were discouraged from higher education after the Japanese annexation of their country in 1910, Helen Kim completed her studies at Ewha, did graduate work with honors in the United States and became the first Korean woman to hold a doctorate. First as dean and professor, later as Vice-President and after 1939 as President of Ewha, she gave of her abundant energy, wit and devotion to prepare women for wider responsibility.

World War II brought the first crucial test of Helen Kim's courage. School curricula were rigidly prescribed as the Japanese sought to enforce a system antithetical to Christian belief. Although now denied earlier foreign support Ewha held to its motto of Truth, Goodness and Beauty and to its insistence upon human dignity.

The bright promise of Korean independence in 1945 was dimmed by political difficulties of rehabilitation, but Ewha became a university and its curriculum expanded to meet the challenge of service in the Republic. The Communist attack in the summer of 1950 drove Ewha to its "campus in exile" at Pusan.

There for two and one-half years classes were held in rough sheds with tent roofs and no floors. Dr. Kim took Ewha Womans University back to Seoul with the signing of the truce in 1953 to find the campus looted and wrecked. Again rehabilitation was achieved with the help of parents, patrons and foreign friends and in 1961 Helen Kim retired from active direction to Chairmanship of the Board of Trustees. With its student body of over 6,500, Ewha now enrolls one-half of all women who attend college in Korea and is the largest women's university in the world.

A fervent patriot, Helen Kim helped found the Young Women's Christian Association in 1922, helping develop its literacy work that fostered the movement for Korean cultural awareness and independence. She was a founder of *The Korean Times* and remained as publisher for three years. As an active member of their boards she has helped build the 4-H Clubs, the Korean Research Library and the International Night School. Five Korean Missions to the United Nations General Assembly have included her as a distinguished member. A devout Christian, she has given liberally of herself to her church and its work at home and abroad.

By these works Dr. Helen Kim has become a symbol to Korean women of their new awakening.

DARA N. KHURODY

(1906-)

TRIBHUVANDAS K. PATEL

(1903-)

and

VERGHESE KURIEN

(1921-)

Dara N. Khurody, Tribhuvandas K. Patel and Vergheese Kurien have been elected to share the Award for Community Leadership, for creative coordination of government and private cooperative enterprise that has improved the supply of an essential food and sanitation in one of Asia's largest and most crowded urban complexes and raised living standards among village producers.

In the predominantly vegetarian diet of South India, milk provides protein and cooking fat called ghee. For centuries families kept their own milch cattle, usually buffalo. As Greater Bombay's population expanded beyond the island city to over three million there was little room for the cattle. Crowded into unsanitary stables in congested residential areas, many animals died for lack of grazing or other feed. Milk producers began to overcharge for milk, often contaminated and adulterated, and in ever decreasing supply.

D. N. Khurody began in the early 1940's to evolve the scheme that today is revolutionizing the processing and marketing of milk in Bombay. Now Dairy Commissioner and Joint Secretary to Maharashtra State, he was then Milk Commissioner of Bombay City. In that capacity he argued persuasively for Government support and carried to implementation in 1949 the Aarey Milk Colony. Located 20 miles north of Bombay City, this largest dairy establishment in Asia is a combination of model dairy farms

and milk pasteurization plant. It distributes clean milk of controlled quality and price to about one and one-half million city dwellers and over 200 hospitals and institutions. Also purchased from Aarey by the Bombay Municipality is the milk issued free daily to some 72,000 undernourished school children.

At the Aarey Colony cattle owners pay rent for farms and the plant buys the milk. Over 20,000 cattle have been removed from Bombay city proper and suburbs by this means. With proper care, milk yield per animal has increased from 18 to 20 per cent and thousands of calves and buffalos have been saved from starvation or slaughter. A second plant at nearby Worli which began operation in 1962 is designed to service similarly another one and one-half million of Bombay's population.

Bombay's growing demand for milk also has provided the basis for a new rural way of life around Anand some 200 miles inland. Here Tribhuvandas K. Patel and Verghese Kurien were developing the Kaira District Cooperative Milk Producers' Union, begun in 1948 by combining two village milk producers' societies and a dairy processing 500 pounds of milk daily. Now President of the Union, Patel was the organizing genius in building this cooperative effort. As Manager, Kurien provided the necessary administrative and scientific direction to a hard working staff of specialists, laborers and villager aides. Rapid expansion by 1962 had brought into the Milk Producers' Union 219 farmer societies with 46,400 members and milk processed in that year grossed over \$6,000,000.

The Anand Milk Producers' Cooperative was encouraged by the then Bombay State Government, which contracted for its entire supply of pasteurized milk at stable and premium prices. Veterinary and technical aid was extended to villagers and the Public Works Department built new roads to facilitate collection of milk from outlying villages. As additional supplies of milk became available these were distributed through the facilities of the Aarey Milk Colony.

As dry season milk production at Anand increased to meet the requirements of the Aarey Colony, this left a surplus during the more productive winter months. To absorb this surplus the Kaira Cooperative Union built a processing plant with generous

financial assistance from the Bombay Government. Assistance also came from UNICEF, New Zealand under the Colombo Plan and several other foreign countries. The new plant was the first in India to produce milk powder, condensed milk and special powdered milk for babies. It is the first in the world to convert buffalo milk into powdered milk. Now marketing these products under the trade name of AMUL through their own all-India sales organization, the Union's concern is further expansion to meet mounting orders.

These advances have raised the quality of the dairy industry as farmer-owners under tutelage of their Union leaders gradually accept new ideas of feeding and caring for cattle and handling milk.

As evidence of their pioneering leadership, Khurody, Patel and Kurien today are asked to help initiate similar agencies elsewhere in India. Their efforts have become a model of accomplishment by patient but determined joining of government concern with the capabilities and aspiration of ordinary farmers.

U.S. PEACE CORPS VOLUNTEERS IN ASIA

Volunteers of the U.S. Peace Corps in eleven Asian countries have been elected to the Award for International Understanding, for their contribution to understanding among people and service to the cause of peace and humanity in a direct and personal way.

While the Award cites specifically the accomplishment of "persons in Asia," the Board of Trustees also commends the Peace Corps Volunteers serving in the Near East, Africa and Latin America.

The problem of achieving peace amidst the tensions and dangers of a nuclear age occupies the mind of much of the human race, yet few within it discover a useful way to contribute. In reaffirming the essential community of interest of all ordinary people, regardless of creed or nationality, the Peace Corps Volunteers belong to that small but growing fraternity who by their individual efforts do make a difference.

Recognizing that the Peace Corps depends entirely upon the quality of its Volunteers, the screening process is rigorous. More than 70,000 Americans have volunteered. Less than 10 percent have been accepted as trainees and of these some 16 percent have been selected out during training.

The first Asian contingent arrived in the Philippines on October 12, 1961. By mid-1963 some 1,400 Volunteers were serving in Afghanistan, Pakistan, India, Nepal, Ceylon, Thailand, Indonesia, Malaya, North Borneo, Sarawak and the Philippines. They represented a cross-section of urban and rural America. The youngest was 18 and the oldest a 76-year old water supply engineer working in Pakistan. A few were married couples, but most were single men and women in the early summer of their lives who had come to unfamiliar countries to learn and share with unfamiliar peoples their energy and technical skills.

Tasks performed by Volunteers in Asia reflect the wide spectrum of middle-level, and sometimes advanced-level, skills

requested by respective governments. Nurses, doctors, and laboratory technicians came to help staff district hospitals, rural clinics and leprosaria in Sarawak, Malaya and four other Asian countries. Mechanics have taught repair of vehicles in Afghanistan and of farm machinery in India. Instructors of vocational agriculture have been at work in Thailand, mathematics teachers in Ceylon and athletic coaches in Indonesia. Engineers have built roads in North Borneo and schools in Nepal.

In the Philippines the 628 Volunteers were measured against the demanding earlier example of the "Thomasites" who arrived in 1901 to found the public school system. Crossing the Pacific after the Battle of Manila in a converted cattle ship, the transport Thomas, they journeyed often by carabao cart, banca and on foot to start the schools that became the foundation of democracy in the Republic. The Peace Corps Volunteers, serving mostly as teachers aides in English to strengthen that public school system, are proving worthy successors to those intrepid pioneers.

Far more consequential than these technical contributions are the difficult-to-measure achievements. By choosing as Volunteers to share the lot of their fellow workers in each country, economic and status barriers have been minimized. In the process of jointly tackling the problem that must be solved for progress, the Volunteers and their hosts discover the human interdependence and mutuality of satisfaction that must provide the personal basis for an enduring peace.

1964

GOVERNMENT SERVICE

YUKIHARU MIKI (Japanese), "for humanistic foresight in engineering community-wide modernization and well-being."

PUBLIC SERVICE

Father NGUYEN LAC HOA (Chinese origin, citizen of South Vietnam), "for extraordinary valor in defense of freedom."

COMMUNITY LEADERSHIP

PABLO TORRES TAPIA (Filipino), "for mobilizing the savings of his community for its productive needs."

INTERNATIONAL UNDERSTANDING

WELTHY HONSINGER FISHER (American), "for unstinting personal commitment to the cause of literacy."

*JOURNALISM AND LITERATURE**

RICHARD GARRETT WILSON (British) and KAYSER SUNG (Chinese-born British), "for accuracy, impartiality and probing economic journalism."

* This was amended by a Board Resolution on September 28, 1964, to include other forms of communication, such as radio, TV and the cinema.

YUKIHARU MIKI

(1903-1964)

Governor Yukiharu Miki of Japan's Okayama Prefecture, is the Awardee for Government Service, for humanistic foresight in engineering rapid but orderly modernization, assuring well-being for the entire community.

Now in his fourth term as Governor, Yukiharu Miki, over the past 13 years has led in transforming Okayama from a stagnant prefecture relying on fishing and agriculture into an industrial miracle of modern Japan. While creating a major port and giant, bustling industrial estate from once muddy shallows along the Seto Inland Sea, he also cared for the people. Through creative planning there is now congenial living for citizens of Okayama as they shift from a rural to industrial economy. For those remaining on farms, modern methods and new pursuits, including dairying, have brought prosperity.

Yukiharu Miki first entered government service in 1938 as a medical doctor in charge of the Health Consultation Center of Okayama, where he was born in 1903. Later, as a senior official in the Ministry of Health and Welfare in Tokyo, he was the crusading author of Japan's first Tuberculosis Prevention Law.

A political novice and a poor man, he was induced by friends in 1951 to run for election as governor of Okayama Prefecture. The resounding majority that swept him into office inaugurated a new chapter in Okayama's history. Until then the Prefecture has been by-passed by the postwar rush toward industrialization and reconstruction of Japan's great cities. Although coastal areas were more prosperous from fishing, fertile rice land and commerce, inland Okayama was poor.

Mobilizing the skills and enthusiasm of the Prefecture, Okayama's new governor developed a master design for a new industrialized community with "sun, green and space." In 1954, at the sleepy fishing village of Mizushima, dredges began sucking

silt to create a deep-water channel and filling in shallow tidelands. Bulldozers carved of hills for rock fill. Dams and canals were built to insure an uninterrupted flow of fresh water for industrial use. Strictly zoned industrial, residential and recreation areas were linked by broad new roads. Special schools trained farmers for industry.

With a burning sincerity and vision that won hard-headed bankers, the Governor floated bond issues and negotiated loans. He had spent \$55 million on the Prefecture's development before signing the first big industrial clients in 1958. Industry was lured to Okayama by the Governor's personal, persistent visits to the headquarters of corporations throughout Japan. Today 20 companies are manufacturing petroleum products, steel, chemicals, synthetic fibers, vegetable oils, marine engines, automobiles and heavy electrical equipment in plants erected on some 27.7 million square meters of reclaimed land. He aimed to double the Prefecture's per capita income in 10 years and the goal was realized in five.

While industry provides employment and income for a new way of living for 1.7 million inhabitants, Governor Miki is equally concerned with health, education and better homes. New schools, care for the mentally retarded and aged, parks and sewage disposal plants all have been provided. His administration and the great new metropolies emerging under his leadership give substance to the theme that was his choice: "Friendship, orderliness and service."

NGUYEN LAC HOA

(1908-)

Father Nguyen Lac Hoa, Catholic priest of Binh Hung, South Vietnam, is the Awardee for Public Service, for extraordinary valor in defense of freedom, strengthening among a beleaguered people the resolution to resist tyranny.

Escaping in late 1950 and early 1951 from Communist persecution of Roman Catholics in Kwangtung Province in South China, Father Nguyen Lac Hoa and 2,100 of his parishioners lived precariously for eight years in Cambodia. In 1956 the priest searched in 25 countries for a more permanent solution for his people but found only sympathy and no answer to their problem. Forced again to move by Communist guerrilla harassment and finally Cambodian recognition of Communist China, many of the stateless refugees sought sanctuary on their own in the new Republic of South Vietnam. A few who could afford the long voyage left for Taiwan. Learning from the priest of their plight, the Government of South Vietnam offered to the remaining 450 families to migrate, citizenship and a homestead.

On March 17, 1959, Father Hoa and his weary flock arrived at Binh Hung, the remote place on the southernmost Camau Peninsula where they had permission to settle. Swampy, mosquito-infested and imperiled by guerrillas entrenched in surrounding mangrove forest, it was barely habitable, but the land was fertile and fish were plentiful in waterways crisscrossing the delta.

In three months of relentless toil that spared no adult or child a village was raised above the flooded land and the first rice crop planted. The guerrilla-wise priest, himself a former soldier, also drilled every man to be an aggressive fighter. When the Viet Cong struck, the villagers fought back, armed only with fishing knives and wooden staves. With the few weapons then supplied by the Government, the defenders suffered losses but never defeat in the frequent raids and ambushes that followed. Father

Hoa taught them no battle could be won by standing still—day and night patrols moved out learning every place for ambush or hiding and engaging the enemy on his own ground.

The fighting spirit of the little band earned Government recognition as a Village Self-Defense Corps, qualifying it for military aid. Refugee Chinese Nationalist soldiers, Montagnards from the central highlands, Nung from the north, and local Vietnamese were recruited to join the defenders. Urgently needed supplies began to arrive regularly by helicopter. Government agencies, Catholic Relief Services, CARE and others helped. In three years, Vietnamese moving in from outlying farms for protection, swelled the population of the village and adjoining hamlets to over 1500.

As military commander without rank for Hai Yen Special Sector, the priest worked closely with Buddhist and Cao-Daist leaders, whose adherents were most numerous in the area, to promote security measures in villages. Though the Viet Cong were not eliminated, his Corps of Sea Swallows, by late 1963 numbering more than 1,000, extended relative security over 200 square kilometers and 18,000 inhabitants.

This year, when the military command was given to regular army officers, Father Hoa welcomed the change. Now 56, he devotes his energies to his spiritual duties and schools, and serves as adviser-chaplain to the Sea Swallows, admonishing any who tire of the long struggle: "For our freedom, if we are tired, we cannot be free."

PABLO TORRES TAPIA

(1908-1967)

Pablo Torres Tapia, rural banker from Tanauan, Batangas, is the Awardee for Community Leadership, for steadfast determination in mobilizing the savings of his community to provide workable credit facilities for its productive needs.

In a community where economic progress formerly was stifled by usury, Tapia has shown that perceptive and patient use of sound loans can unlock great potentialities. Farmers today raising bountiful and diversified crops and merchants with thriving stalls all demonstrate the results that can be achieved. This enhanced prosperity is not limited to the few but is shared by an ever widening proportion of the citizens.

Tanauan suffered cruelly during World War II and amidst the chaos following liberation and independence, the community's needs seemed limitless. To rebuild their homes, replace their carabao or small market wares many Filipinos had nowhere to turn but to moneylenders, whose interest rate on loans often reached ten percent per week. Yet, savings others accumulated in bamboo tubes and tin cans were idle and frequently lost.

Arraying themselves in battle against these practices that were sapping the town's vitality, Pablo Tapia and a small group of like-minded citizens in 1947 reestablished the Square Deal Savings and Loan Association. Founded originally in 1926 by a beloved Tanauaño, Dr. Juan V. Pagaspas, this institution had been destroyed during the fighting that also cost the life of its champion. Now Tapia and his associates walked from house to house in the barrios and in the poblacion, persuading farmers and town people to deposit five or ten pesos each month. Basilisa Carandang, a fellow lawyer who later became his wife, set up the books and provided rent free premises in her home.

Within three years the Association had capital and deposits totalling P300,000. An inveterate horticulturist by avocation,

Tapia used these funds productively in loans for seed, fertilizer, water tanks, and the like. Local industries were financed, including tailoring of remnants into inexpensive clothing. Showing faith in the small farmer and merchant, loans often were given. In effect, Tapia supervised the credit, constantly visiting farms and markets to suggest ways of increasing production. He started a monthly newspaper, *Tinig Ng Tanauan*, to give depositors helpful information on farming and community affairs.

In 1951, to cope with increasing demands for small credit, the Association was converted to the Square Deal Banking Corporation with the help of the late Senator Jose P. Laurel and Vicente Sabalvaro, who had been associated with the pre-war institution. The farmers' cooperative, also reactivated by Tapia and colleagues in 1948 as a sister organization of the Association, was expanded to sell agricultural chemicals, fertilizers, poultry feeds and hardware as well as general merchandise. A warehouse, rice mill, corn dryer and lumber mill were added. Specialists from the College of Agriculture at Los Baños were encouraged to demonstrate new techniques in Tanauan and Tapia took truckloads of farmers to the College to learn.

In 1957, with the volume of business exceeding two million pesos, the bank was helped by the late Alfredo Yatco, Teodoro F. Valencia and again by Senator Laurel to reorganize as the Philippine Banking Corporation with headquarters in Manila to avail itself of greater capital resources. Tapia, who transferred to Manila in 1960 as Vice-President in charge of the branch banking he knows so well, still commutes to meet the farmers and small merchants who are the Bank's clients in Tanauan every Sunday, which is the heaviest banking day.

WELTHY HONSINGER FISHER

(1880-)

Welthy Honsinger Fisher, founder and moving spirit of Literacy House in Lucknow, India, is the Awardee for International Understanding, for her unstinting personal commitment to the cause of literacy in India and other Asian countries whose teachers have sought her guidance.

Now 84, Welthy Fisher still is responding vitally to the plea of her late friend Mohandas K. Gandhi: "Go to the villages and help them. India is the villages."

Saksharta Niketan, or Literacy House, which has become the means of fulfilling Gandhi's commission, first was established at Allahabad in 1953 and four years later moved its permanent headquarters to Lucknow. Over the past 11 years it has trained nearly 7,000 literacy teachers. These men and women have taught simple reading and writing to an estimated one and one half million villages and city laborers, for whom learning to write their own names made the difference between "being nobody and becoming someone."

Once villages achieve functional literacy using carefully prepared primers, these are followed with simple readers on hygiene, local government, farming and other subjects of immediate concern in day-to-day living. The 60 books especially written and published by Literacy House for new readers circulate through mobile Tin Trunk Libraries, often carried on the rear of bicycle. A weekly newspaper in Hindi, *Ujala*, keeps new literates abreast of events. For writers encouraged to develop these constructive, popular materials, a quarterly, *Lekhak*, provides a forum of intellectual exchange. Among other techniques for mass communication now in use is the ancient art of puppetry that is proving highly effective in imparting ideas.

Located on a grassy plain near the capital of Uttar Pradesh, one of the largest states of North India, Literacy House

increasingly is called upon by the national and state governments and semi-government agencies for social education. Since 1958, some 3,000 elected village councilmen and voluntary leaders have been instructed in the responsibilities of their new offices. Two continuous programs teach women to become community development workers. Adding an international dimension, other than financing from Canada, India and the United States, have been teachers-trainees from Afghanistan, Iraq, the Philippines, Sarawak and the Tibetan refugee community.

In keeping with its founder's concept, "in a surrounding close to nature life flows with dignity and grace" on the campus of Literacy House. The modest red-brick buildings, including hostels for 100, all were designed for function and unostentatious comfort. Welcoming everyone is a central House of Prayer for All Peoples respecting diverse beliefs and acknowledging one God.

Welthy Fisher, who mobilized the talents and resources and led in this effort, first came to Asia in 1906. As the young American headmistress of a mission school in Nanchang deep in Central China, she helped educate a new type of modern Chinese woman in a time of turbulent transition from Manchu Empire to Republic. World War I brought her to France in service with the YMCA to do welfare work among Chinese laborers in munitions factories. Married in 1924 to the Right Reverend Frederick John Fisher, Methodist Bishop of India and Burma, she shared joyously in his extraordinary mission and close friendship with India's spiritual leaders.

Loss of her husband in 1938 led Mrs. Fisher to fourteen years of travel, writing and lecturing about educational systems she studied in South America, the Middle East and Asia. She was 72 years old when Gandhi's insistent plea encouraged her to work with the Allahabad Agricultural Institute in making technical knowledge understandable in the villages. From this beginning grew her vision of a House to help in some measure India's 320 million illiterates. For this work she found expression in the lines of a mystic Oriental poet: "It is better to light a candle than to curse the darkness."

RICHARD G. WILSON

(1928-)

and

KAYSER SUNG

(1919-)

Richard K. Wilson, Editor, and Kayser Sung, Publisher and Managing Editor of the *Far Eastern Economic Review* of Hong Kong, are the Awardees for Journalism and Literature, for their accuracy, impartiality and continuing search for facts and insights in recording Asia's quest for economic advance.

Within the past decade the *Far Eastern Economic Review* has become the most consequential journal of its kind in Asia. Providing detailed and increasingly dependable information on trade, finance, economic problems and progress and related political trends, it has earned regard as valued reading among businessmen, government officials and scholars.

In most of Asia, the objective, careful economic reporting and analysis that is vital to development is both a new and difficult craft. Statistics often are incomplete and occasionally unreliable. Preoccupation with politics in the era of new independence has sometimes led to ignoring the hard realities of economic life upon which material achievements must be based. Private businesses and governments are often reluctant to permit probing inquiry.

Despite these and other obstacles, editors Wilson and Sung and their staff produce each week a journal that is setting a standard for critical but fair examination of the complex spectrum of economic affairs. With their 40 odd colleagues in Hong Kong and 20 correspondents in Asia and the West, Wilson and Sung, since 1960 have also published a *Yearbook* that is proving a reliable reference source for industrialists studying markets and government planners charting investments.

Richard G. Wilson came to the *Review* as editor in 1958. Trained both in law and journalism in England and the United States, he served his apprenticeship on the *Financial Times* of London to specialize in economic journalism. Well-traveled and scholarly, his special interests are the Afro-Asian problems of telescoping economic and social advance into a short span of time.

Kayser Sung, who joined the *Review* in 1959 as Deputy Editor after 12 years with Reuters, mastered his profession during the hard years in wartime China. He was appointed concurrently Publisher and Managing Editor in 1964. His passion for research as the foundation for all reporting is becoming a distinguishing mark of the journal's staff. An authority on such subjects as the textile industry in Asia and the terms of European trade with the Far East, he also shows himself sensitive to the human dimension.

In their editing of the *Review*, Wilson and Sung have demonstrated that journalism can play a constructive role in fostering healthy growth. Both respected for their professional and personal integrity, these two editors are making economic news significant and readable.

1965

GOVERNMENT SERVICE

PUEY UNGPHAKORN (Thai), "for dedication, unquestioned integrity and high order of professional skill brought to the management of Thailand's public finance.

PUBLIC SERVICE

JAYAPRAKASH NARAYAN (Indian), "for constructive articulation of a public conscience for modern India."

JOURNALISM, LITERATURE AND CREATIVE COMMUNICATIONS ARTS

AKIRA KUROSAWA (Japanese), "for perceptive use of the film to probe the moral dilemma of man amidst the tumultuous remaking of his values and environment of the mid-20th Century."

COMMUNITY LEADERSHIP

LIM KIM SAN (Singaporean), "for marshalling talents and resources to provide one-fifth of Singapore's burgeoning population with decent moderately-priced housing amidst attractive surroundings."

INTERNATIONAL UNDERSTANDING

BAYANIHAN FOLK ARTS CENTER AND ITS SUPPORTING ENTITIES (Philippines), "for projecting a warm and artistic portrayal of the Filipino people to audiences on five continents."

PUEY UNGPHAKORN

(1916-)

Dr. Puey Ungphakorn, Governor of the Bank of Thailand, is the Awardee for Government Service, for dedication, unquestioned integrity and a high order of professional skill brought to the management of Thailand's public finance.

The career of Dr. Puey confirms that a single individual can make significant contributions to the progress of his country, despite a tendency toward official corruption evident in many developing lands. Thailand's relative prosperity and steady growth matched by stable finances are a measure of his accomplishment.

After wartime service in the Free Thai Movement and doctoral studies in England, Dr. Puey joined the Ministry of Finance in 1949 as a third-grade official in the Comptroller General's Office. Hardworking and brilliant, within the next three years he became one of the principal negotiators in securing World Bank loans for rehabilitation of his country's railways and port facilities and construction of a large irrigation dam.

Proven competence won him promotion to Technical Assistant to the Permanent Undersecretary of Finance and concurrently Deputy Governor of the Bank of Thailand. In these posts, Dr. Puey instigated reorganization of the country's trade, foreign exchange and fiscal policies. A government monopoly on rice exports was replaced with a flexible premium system that made Thai rice competitive in world markets while keeping domestic prices of this staple within the budget of ordinary citizens. A single, more realistic exchange rate supplanted the former multiple exchange system while an Exchange Equalization Fund stabilized the currency. Thai accounting and budgetary methods were formed.

When manipulation of import controls threatened abuses, Dr. Puey requested leave and instead was posted to the Royal Thai Embassy in London. Promoting foreign investment in industry

for his country, he also mastered the intricacies of the world tin market, winning an increase in Thailand's quota and election as Vice-Chairman of the International Tin Council.

The Revolutionary Party that took power in Thailand in 1958 brought Dr. Puey home to direct a new Budget Bureau and a Fiscal Policy Office. In 1959, when a banknote printing scandal forced resignation of the incumbent, he was made concurrently Governor of the Bank of Thailand. Among the cautious yet continuing reforms he introduced were the Commercial Bank Act of 1962, low interest financing of raw material stocks for industry and creation of a central planning agency. Through this agency he initiated construction of highways to open inaccessible land for diversified farming, installation of an adequate drainage and sewerage system for Bangkok, and improvements in education to meet growing manpower needs. Over the past year he has also served as Dean of the Faculty of Economics at Thammasart University.

Exemplary in conduct of his personal affairs, Dr. Puey, his wife and three sons live modestly on his salary as Governor of the Bank. He has avoided participation in tempting business ventures and gives earnings from his other posts to deserving people and social services. Repeatedly jeopardizing his career to abide by principle in defense of the public interest, he has become perhaps the most respected civil servant in Thailand.

JAYAPRAKASH NARAYAN

(1902-)

Jayaprakash Narayan, leader of the Indian *Sarvodaya* Movement, has been elected to receive the Award for Public Service, for his constructive articulation of a public conscience for modern India.

Like José Rizal, J. P. Narayan has had the courage to see and say that forms such as independence, nationalism or socialism in themselves offer no adequate answers to man's most basic needs. When, through bureaucracy, over-centralization, distortion of purpose or otherwise, they make of tyranny a handmaiden, their worth is discounted.

Instead, Narayan begins with the individual, his yearning for liberty and need to become equal to its demands. Through the *Panchayat Raj*, or villaged-based sovereignty, he aims to restore to the rural mass of Indians meaningful control over decisions most intimately affecting their daily lives. The *Sarvodaya*, or "Force of Service," Movement is his instrument. As its President, he has mobilized some 10,000 volunteers to carry this revolution in ideas to the countryside where they energize and integrate with efforts at *bhoodan*, or "land gift" to the community, and local self-government.

Following in the path of his great mentor, Mohandas K. Gandhi, Narayan also has given new relevance to "non-violence" as a concept for resolving conflict and protecting the rights of minorities. In the bitter feud between Pakistan and India over Kashmir, he was the architect of an *entente* that opened the way for greater sanity. Rebel Nagas and ruling Indian authorities acceded to his persuasion in agreeing to negotiate the issue of Naga demands for a separate state. Tibetans resisting the imposition of Chinese Communist imperialism found in Narayanan a champion who alerted his countrymen.

The route by which Narayan arrived at his present views and stature largely parallels India's history over the past half century since his birth in a tiny village in the state of Bihar. Returning from study in the United States as a radical revolutionary and Marxist, he was repeatedly imprisoned and several times escaped during the struggle for independence. Although the organizer of the Socialist Party and apparently heir to major leadership in his new nation, he renounced dialectical materialism and power politics a decade ago to devote himself to the more lonely and unrewarding task of enlightening and guiding his countrymen on crucial problems many were reluctant to face.

By personal modesty wedded to clarity of thought and force of personality, Narayan has shown that the moral strength of truth can make a difference. Some Indians regret his refusal to become involved in the complexities of administering government, but few can doubt his contribution in dispelling the myths of formulas that offer trite solutions. Through Narayan, the man, India's heritage of accumulated insights and methods for translating human values into action is being given contemporary relevance at home and abroad.

AKIRA KUROSAWA

(1910-)

Akira Kurosawa, Japan's master film director, has been elected to the Award for Journalism, Literature and Creative Communication Arts, for his perceptive use of the film to probe the moral dilemma of man amidst the tumultuous remaking of his values and environment of the mid-20th Century.

Among the major communications media created by advances in science and today molding human aspirations and behavior, the film has few peers. So pervasive is its influence that the film now often supersedes the novel and the dramatic stage as a means to enabling the individual to understand a deeper reality in his own existence.

Yet, in Asia, as elsewhere, this powerful medium has often served more to disguise consequential issues. Entertaining and diverting, films frequently foster expectations without awareness of the demands upon the individual for their realization.

It is Kurosawa's matching of mastery of his art, in all its technical sophistication, with ruthless concern for the "humanism" of the individual that lends his work a special quality. His sensitive treatment of this intrinsic element has given greater content to the lives of those he has reached.

Now 55 years old, this accomplished film director has devoted a quarter of a century to the sustained, inspired labor that is requisite for genius. Starting as a young artist-apprentice with the Photo Chemical Laboratory, one of Japan's pioneer movie makers, he was fortunate in finding as his teacher, Kajiro Yamamoto, a director then second to none in the country.

Long before Kurosawa's film, *Rashomon*, won the Grand Prix at the Venice International Film Festival in 1951, he had painstakingly evolved in relative obscurity his method for coaxing the best from actors using scripts he had helped write. In the detailed, scrupulous effort he devotes to editing, he reveals

the conscientious craftsman. Fame from a succession of superior films produced since then has not slackened his standards.

Quiet, intense, stubbornly determined and simple, Kurosawa shuns the publicity that easily engulfs luminaries in the film industry. He lives unpretentiously with his wife and their two children, cultivating his liking for antiques and his friends. The same concern for being genuinely and zestfully human is evident in his personal life as it is in his art.

LIM KIM SAN

(1916-)

Lim Kim San, Singapore's spectacular public builder, has been elected to receive the Award for Community Leadership, for marshalling talents and resources to provide one-fifth of Singapore's burgeoning population with decent, moderately-priced housing amidst attractive surroundings.

Throughout Asia few problems are more acute than that created by people flocking to cities unprepared to accept the influx. The slums that usually result are a blot upon any civilized society and make a mockery of popular aspirations for a better way of life.

This dilemma has been resolved in Singapore State in a manner that provides a model for much of the world. Completing construction of one new apartment every 45 minutes, on the average, at a cost of less than US\$3.00 per square foot, the government can offer every applicant a new home within three days. These apartments, renting from US\$7.00 to US\$20.00 per month, offer kitchens, baths, electricity, gas, water and elevators. Erected in blocks rising up to 16 storeys, they are grouped into new communities complete with stores, social centers, schools, recreation, facilities and delightful landscaping.

As the person primarily responsible for this achievement, Lim became Chairman of the Housing and Development Board in 1960 and in 1963 was named Minister of National Development. Upon assuming office five years ago, he reorganized an earlier halting effort at government-assisted housing, applying quietly and scrupulously a businessman's energetic pragmatism to the construction industry. Private contractors were encouraged to participate to the maximum, while their profits were kept reasonable and costs of materials were stabilized. Economic activity and employment generated by the building of some 60,000 apartments has been a major element in Singapore's growing prosperity.

Reclamation and construction of facilities for carefully designed industrial estates and satellite cities now promise that Singapore can "digest" in a healthy environment a population expected to reach two million within another 18 months. While continuing to expand government housing for the less fortunate citizens, Lim recently initiated the first major urban redevelopment program in Asia to transform the old port city into a modern metropolis. Private initiative and investment is being fostered to build apartments for middle-class and wealthier families as part of a harmonious commercial-residential complex on the 225 square mile island state.

Alert to human needs, Lim and the government of which he is a part is broadening the base of private ownership by selling government-built apartments to individual families on easy terms. Meanwhile, occupants are learning to maintain clean premises, properly disposed of garbage, and otherwise to be considerate of their neighbors. Furnishings and household appliances, both tasteful and inexpensive, have been made available by enlisting competitive participation by architects and manufacturers. The community life that is developing in the glistening, meticulously-managed blocks of flats that have replaced squalid, over-crowded shacks testifies to the concern and probity of the leaders who made this possible.

BAYANIHAN FOLK ARTS CENTER AND ITS SUPPORTING ENTITIES

The Bayanihan Folk Arts Center and its supporting entities have been elected to receive the Award for International Understanding, for projecting a warm and artistic portrayal of the Filipino people to audiences on five continents.

The making of One World progresses only as citizens of all nations sense a shared pleasure in knowing one another. This is a human dimension, more fundamental than the political and economic rivalries which now divide us. As popular, non-verbal art forms, music and the dance are uniquely fitted for this purpose.

From the rich cultural heritage of the Philippines the Center has distilled and designed a superior choreography with appropriate musical score and songs, costumes, stage settings and lighting. Such technical proficiency has been matched by a regimen of disciplined training for the largely amateur dancers and musicians. Management of performances at home and tours abroad has been fully professional, yet with the enthusiastic cooperation of sponsors, parents and patrons in the best *bayanihan* tradition. Recognition won by the Philippine Bayanihan Dance Company in capitals of Europe, Asia, Australia and the Americas is the product of such sustained enterprise by all.

Philippine Women's University began research on dances and related epics among ethnic groups throughout the Islands more than 40 years ago. Ancient rituals and ceremonies of Muslims and Pagans were recorded and their artifacts collected. Diverse customs and dances of the Christian communities were studied and later filmed. Scholars and artists joined talents to evolve performances evocative of the best they had learned.

Beginning with their first appearance abroad at the Pakistani Folk Dance and Music Festival late in 1954, the dancers

and musicians from Philippine Women's University enlarged their repertoire for presentation at the Brussels Universal Exposition of 1958. Applauded and invited to perform before ever-growing audiences, the Bayanihan Company prompted creation of the Folk Arts Center. Supported both by Bayanihan Folk Arts Association and Philippine Women's University, the Center's performers have become a popular international institution, appearing at World's Fair in Seattle and New York and winning new understanding of the Philippines from Caracas to Tel Aviv and Canberra. By example, they have helped stimulate other Philippine folk dance troupes and so broadened participation by young people.

In an era when the search for a sense of national identity often runs counter to need for international acceptance of man's brotherhood, the Bayanihan Folk Arts Center has shown that both can be well served, the one in complement to the other. For discovering in each other's folk traditions the universals of joyfully working and celebrating together brings to persons everywhere a fuller sense of kinship.

1966

GOVERNMENT SERVICE

PHON SANGSINGKEO (Thai), "for his farsighted design in creating and staffing superior mental health services for his country."

PUBLIC SERVICE

KIM YONG-KI (Korean), "for his example of Christian principles practically applied to improve agriculture and imbue rural life with new joy and dignity."

COMMUNITY LEADERSHIP

KAMALADEVI CHATTOPADYAY (Indian), "for her enduring creativity with handicrafts and cooperatives, as in politics, art and the theatre."

INTERNATIONAL UNDERSTANDING

THE COMMITTEE FOR COORDINATION OF INVESTIGATIONS OF THE LOWER MEKONG BASIN AND COOPERATING ENTITIES, "for purposeful progress toward harnessing one of Asia's greatest river systems, setting aside divisive national interests in deference to regional opportunities."

JOURNALISM, LITERATURE AND CREATIVE COMMUNICATIONS ARTS

The Board of Trustees has elected to make no Award for this Category this year.

PHON SANGSINGKEO

(1907-)

Dr. Phon Sangsingkeo, Thailand's Undersecretary of Public Health, has been elected to receive the Award for Government Service, for his far-sighted design in creating and staffing superior mental health services for his country.

Rapid urbanization throughout much of Asia threatens the individual caught up in this process with psychic shock. Torn from the traditional security of a family-centered rural way of life, he is compelled to make his way in a strange, new, uneasy and demanding environment. The human cost is apparent in the growing number both of mental cases and juvenile delinquents.

As Dr. Phon has observed, "Societies have a threshold of tolerance for rate of change which, if exceeded, must lead to some measure of social disorganization." He had made it his professional life concern to ameliorate the human price of this transformation.

Care of the mentally ill has progressed greatly since the late 19th century when in Thailand, as often elsewhere, treatment consisted of placing the afflicted in chains or locking them in small barred rooms, and administering holy water, decoction, or snuff. Today Thailand has eight major mental institutions providing hospitalization, neurological treatment and enlightened care for mentally retarded individuals. Mental Health Clinics attend to outpatients and provide child guidance, aided by psychiatric units in General Hospitals and Mobile Psychiatric Units. In pleasantly designed mental hospitals named after flowers, therapy includes participation in farming, furniture making and other crafts. Although there still is scope for improved curative treatment, including greater acceptance of psychiatry as a vital field of medicine, emphasis now is upon prevention and mental health education.

Since he first trained to become a doctor in Thailand, except for tours of graduate study in psychiatry in the United States

and Europe, Dr. Phon, now 59, has devoted his talents to government service. Beginning as a local community health doctor at Sakolnakorn in northeastern Thailand in 1930, he moved on to direct the Mental Hospital in Dhonburi and become chief of the Mental Hospital Division in the Ministry of Public Health. Recognition abroad led to his election as president of the World Federation of Mental Health in 1961. The following year he was named Director-General of the Department of Medical Services and, in 1964, became Undersecretary of State for Public Health.

Associates and friends affectionately remark that Dr. Phon has been "cool" like "rain"—the meaning of his name—in his approach to the mentally ill. In shaping development of his country's mental health services and encouraging the men and women who staff them, he has combined traditional cultural practices and values with modern techniques. The institutions and methods of care for the mentally afflicted and the preventive education established under his vision and guidance are helping his people make the transition toward modernization with minimal human cost.

KIM YONG-KI

(1912-)

Kim Yong-ki, Korea's farmer philosopher, has been elected to receive the Award for Public Service, for his example of Christian principles practically applied to improve agriculture and imbue rural life with joy and dignity.

"Whangsan" or "wasted hill" was the local name for the inhospitable three and one-half hectare plot outside of Seoul that Kim and his family chose as their challenge 11 years ago. With "one hand on the bible and a hoe in the other" Kim provided for his family and built a productive farm and school for farmers. Today the transformed hill is respectfully called "Canaan."

For the war-scarred ancient land of Korea and some three-fourths of its citizens who are farmers he has shown that the most basic and enlightened of skills applied with work and love for the soil bring consequential material returns. Reaching far beyond agriculture, he has demonstrated the value of erecting simple houses of improved design, adopting a cheaper and more healthful diet, wearing more practical clothes and shunning wasteful customary social demands. Within this context he has tested his ideas, established a nondenominational Christian Church and written his book, *The Way To A True Living*.

Kim and his family are the core faculty of the Canaan Farmer's School, working from four o'clock in the morning until ten o'clock in the evening—specialists from outside also are invited as visiting lecturers. In this unique work-study institution 1,893 men and women have been trained over the past four years. They have learned to raise field crops, vegetables, fruit trees, strawberries, bees, rabbits, goats, cattle and much else. More notable have been the feeling of pride in working the soil and producing food and a sense of nearness to God and nature that this allows, which they have carried with them to other villages.

The dream of rejuvenating Korean rural life that led Kim to Canaan began in his youth—he was born in 1912 in Yangjoo

County, Kyunggi Province, into a family of farmers. Formative influences were his study of the Confucian classics and a deep commitment to Christianity. In his twenties, he built a model village in Bongan and became perhaps the best sweet potato farmer in Korea. This effort he sold to a friend and with the proceeds, founded, in 1945, a new community on waste land in Koyang County, complete with a school and church. In 1950, Kim moved to Yongin County, where he led in creation of the Farmer's Evangelical Folk High School. After five years he could leave this institution to the management of intimate associates and move on to Canaan farm and school.

Guided by an idea and faith, Kim has shown that rural material circumstance in Asia, even when meager, can with sustained work be shaped for the better. In his scheme the spiritual awakening of farmers so that song becomes an intimate and natural expression of their zest is crucial to accomplishment.

KAMALADEVI CHATTOPADHYAY

(1903-)

Shrimati Kamaladevi Chattopadhyay, founder and president of the Indian Cooperative Union, has been elected to receive the Award for Community Leadership, for her enduring creativity with handicrafts and cooperatives, as in politics, art and the theatre.

Among architects of modern India few have been so broadly effective as Kamaladevi in challenging orthodoxy and then giving substance to the innovation. She has shown that women from a traditional society, while winning equality of acceptance in community affairs, also can build needed new social institutions, graced with their more delicate touch.

In an era when the great traditional crafts and artistry often are submerged by mass production of standardized products, Kamaladevi has led in mobilizing for new generations these ancient skills. In her view, "development of any country's handicrafts rests primarily on the women."

While "modern taste is restless and prepared to renew and replace articles more easily and quickly," she has written, handicrafts "speak of an age when dignity lay in silence and beauty in subtlety." In them "one instinctively senses the unity of all arts." To her they are "the ensemble of flowers, fruits, birds and animals, leaves and creepers, gods and human beings."

The vehicle for translating this concept into reality became the Indian Cooperative Union, that she founded in 1948 initially to assist refugees uprooted by partition who were demoralized and often destitute. The first cooperative, a farm, was formed at Chattarpur, some 12 miles from Delhi. The Union joined in building the new city of Faridabad to rehabilitate 30,000 refugee Pathans from the North-West Frontier, providing tools, loans and direction in a new way of living.

With rehabilitation largely accomplished, the Union turned to establishing consumer and handloom cooperatives, which multiplied with remarkable success. The Central Cottage Industries Emporium in New Delhi developed as a marketing outlet for some 700 cooperatives, private dealers and individual producers. Through it, designs were introduced, buyers attracted and products achieved Indian and international sale. Commercial success led to creation of credit cooperatives and other services to meet family needs of both rural folk and urban craftsmen, always buttressed by education.

The woman who guided this enterprise was born in 1903 at Mangalore, India, into the family of a District Collector. After receiving a diploma in sociology from London University, she was among the first educated women in India to appear on public stage popularizing the theater arts. As an organizer of the 1930 Civil Disobedience Movement she was arrested and jailed for five years. An accomplished writer, her interests have ranged far beyond her homeland to participation in international conferences.

In a time when so many nationalist leaders have been content to coast with old causes and slogans, Kamaladevi has had the perception and courage to discover and develop solutions to contemporary needs of her society. Thus she has helped realize the hopes of her countrymen that independence would be more than political, allowing them that added dimension of greater freedom in total life concerns.

THE COMMITTEE FOR COORDINATION OF INVESTIGATIONS OF THE LOWER MEKONG BASIN AND COOPERATING ENTITIES

The Committee for Coordination of Investigations of the Lower Mekong Basin and Cooperating Entities have been elected to receive the Award for International Understanding, for purposeful progress toward harnessing one of Asia's greatest river systems, setting aside divisive national interests in deference to regional opportunities.

Mobilizing Asia's resources to meet man's growing needs is often hobbled by narrow sectional and traditional loyalties. Such shortsighted insistence upon more immediate and personal advantage frustrates rational solutions to many common problems.

Since it was established nine years ago, the Mekong Committee has shown what can be achieved for farmers, fishermen and new industry by international cooperative effort in one of the world's most troubled regions. Created in response to a recommendation of the United Nations Economic Commission for Asia and the Far East, this Committee joins Cambodia, Laos, Thailand and Vietnam in common utilization of the immense potential of the Mekong River. Technical and financial assistance has come from 21 countries outside the basin, 12 UN agencies, four foundations and a number of private business organizations. To date, equipment, technical services, grants and loans totalling some \$105 million have been rallied about one-third pledged by the four riparian countries.

The hitherto untamed Mekong—one of the world's ten largest rivers—rises among the snows high on the Tibetan Plateau and has carved a twisting course, often through rugged mountains, some 4,400 kilometers to the South China Sea. The Lower Mekong Basin, which is the focus of this effort, extends for some 2,500 kilometers from the forests of the Burma border, through Laos, along the dry northeastern frontier of Thailand, through

jungles and deltas of Cambodia and Vietnam. It drains an area nearly twice the size of Japan and is inhabited by some 20 million persons.

Extensive studies by teams of scientists and engineers from the riparian and cooperating nations now have produced an overall Basin Plan with both mainstream and tributary projects. These multi-purpose projects will provide irrigation, power vastly improved navigation, expanded fisheries, plus control of seasonal floods and many other benefits. Navigation improvements now permit night sailing to Phnom Penh. In November 1965 the King of Thailand inaugurated at Nam Pung one of the two electric power and irrigation projects already completed. Construction is underway on four other tributary projects and one tug and barge building program.

Among projects for the mainstream of the Mekong, three have a "one" priority. At Pa Mong just above Vientiane a massive dam between Thailand and Laos will create a reservoir more than 200 miles long, have an installed generating capacity of over one million kilowatts and irrigate roughly one million hectares (two and one-half million acres). Sambor in Cambodia will be the site of a second major power and irrigation dam. A barrage across the Tonle Sap waterway in Cambodia, that each year alternately admits Mekong water to the Great Lake and then drains it, will amplify fisheries and irrigation and hold back salt water from delta lands in Vietnam while deepening water in the shipping channel to the sea.

When the Lower Mekong Basin program finally is completed, at a cost of more than three billion dollars, the largest single natural resource of Southeast Asia will then be in use. The fact that, despite turmoil, war and other differences in the region, so much headway has been made represents a triumph, of reason and consideration of mutual well-being.

1967

GOVERNMENT SERVICE

KEO VIPHAKONE (Laotian), "for sustained initiative and integrity in inaugurating public services for Lao villagers under handicaps that easily could have excused defeat."

PUBLIC SERVICE

His Serene Highness, MOM CHAO SITHIPORN KRIDAKARA (Thai), "for his nearly half a century of pioneering experimentation and education devoted to advancement of Thai agriculture."

COMMUNITY LEADERSHIP

TUN ABDUL RAZAK BIN HUSSEIN (Malayan), "for his leadership as a politician administering with quiet, efficient and innovative urgency the reshaping of his society for the benefit of all."

INTERNATIONAL UNDERSTANDING

SHIROSHI NASU (Japanese), "for his practical humanitarianism, enhancing cooperation in agriculture by learning through multi-national experience."

JOURNALISM, LITERATURE AND CREATIVE COMMUNICATIONS ARTS

SATYAJIT RAY (Indian), "for his uncompromising use of the film as an art, drawing themes from his native Bengali literature to depict a true image of India."

KEO VIPHAKONE

(1920-)

Keo Viphakone, Secretary of State for Social Welfare of the Royal Lao Government and concurrently Commissioner of Rural Affairs, has been elected to receive the Award for Government Service, for his sustained initiative and integrity in inaugurating public services for Lao villagers under handicaps that easily could have excused defeat.

A people only come to feel themselves a nation when they share in common institutions for accomplishing valued public purposes. Nowhere in Asia has the task of creating these facilities been more difficult than in Laos.

Isolated by geography and French colonial policy, the more than two million inhabitants of Laos felt the first stirrings of modernization after World War II. Over the centuries the once proud Buddhist Kingdoms of Lan-Xang had disintegrated before more aggressive neighbors until the remaining small state of Luang Prabang welcomed French protection in 1893. Thereafter incursion was condoned by Tonkinese and Annamese taking over trade, commerce and petty administration. Lao Issara, the freedom movement prompted by Japanese occupation, crystallized a national consciousness among younger elite and members of royalty, that, in 1949, made Laos an autonomous kingdom within the French Union and, in 1954, won full independence.

A keen participant in this struggle, Keo Viphakone was convinced that agitation must make way for building. At his first post as Chief of Water and Forest Service for Champassak Province in late 1945, he had shown his courage and principles in enforcing regulations against the rich and powerful. Serving briefly as Chief of the Forests and Land Division of the new government in 1949, his understanding of the country's needs soon led to appointment as economic representative to high

councils of the Associated States of Indochina in Saigon, then as a senior diplomatic representative to Paris, Washington, D.C. and the United Nations.

When the Royal Lao Government in 1958 decided that the lowland farmers and tribesmen in the hills must be reached with modern system of education, transportation, water works and health services, Keo was brought home to improvise something entirely new for his country as Commissioner of Rural Affairs. In a land where there were only a dozen university graduates at the close of World War II, he had to enlist from without or train from within this entire range of skills. It is a measure of his competence that each of the rightist and neutralist governments that rose and fell in rapid succession over the next nine years retained his services.

Roughly 20 percent of the population of Laos has now been reached by programs under his direction. Starting with relief and resettlement of refugees, Keo trained manpower and fruitfully utilized such outside organizations as Operation Brotherhood International and the United Nations specialized agencies and bilateral aid from several countries. His rural self-help and public works include well-drilling, building schools, roads, bridges, crematories, markets and dispensaries. More than one-half of all U.S. economic assistance to Laos is under his management—repeatedly he has urged the Americans to be more patient in giving help so villagers can become involved in building and cherishing innovations.

As a particularly underdeveloped new nation that has become a cockpit of the cold war, Laos has experienced tortuous military and political changes and easy temptation to ostentatious official corruption. In contrast to many leaders for whom independence has offered an avenue to personal wealth and power, Keo has remained true to his Buddhist faith of simplicity in personal living and scrupulous honesty in official dealings. At the age of 49 he has shown that even under the most adverse circumstances a man who claims his office as a public trust can bring progress to his people and foster their faith in government as a means to serve them.

MOM CHAO SITHIPORN KRIDAKARA

(1883-)

His Serene Highness, Mom Chao Sithiporn Kridakara, Thailand's "father of modern agriculture," has been elected to receive the Award for Public Service, for his nearly half a century of pioneering experimentation and education devoted to advancement of Thai agriculture.

Progress in all countries, particularly the less developed, depends substantially upon examples set by traditional leaders; unless they show the way, change by ordinary farmers becomes doubly difficult. So often in Asia hereditary elite are content with the old order or simply leave the land to join the new urbanites. Mom Chao Sithiporn, instead, chose to leave high position, devoting his life and fortune to introducing agricultural methods new to the Kingdom.

A grandson of King Mongkut and nephew of King Chulalongkorn, Mom Chao Sithiporn grew up at a time when these vigorous monarchs were opening Thailand to foreign contact. Sent to England for schooling, he studied in engineering. Upon return to Bangkok, he first engaged in private business and later joined the civil service, rising in 13 years to the highest rank.

To relieve the routine of his official position he began to study agriculture. Increasingly convinced that other crops than rice should be encouraged, he decided to engage in farming. Also, he had married a noble lady reared in the Royal Household and felt her frail health only could be remedied by life in the open. Family opposition was overcome when his cousin, King Vajiravudh, gave the couple permission to leave and make their own life.

At Bangberd, some 400 kilometers south of Bangkok, Mom Chao Sithiporn, in 1921, acquired 40 hectares of uncultivated upland and set out to prove with scientific management that a farm could be both a place to produce and to live. Contouring, terracing and green manuring of fields and interplanting of crops were first seen in Thailand on his farm. Watermelons, flue-cured Virginia Tobacco and improved corn—now Thailand's third

largest export—were among the new crops he promoted, demonstrating use of fertilizer and insecticides. The earliest Thai advocate of diversified farming, he was the first to breed and sell pure-breed swine and, with imported strains of high-yielding layers, to set up a commercial poultry operation. In his garden were vegetables uncommon to his country. His wife applied modern methods of preserving food. On no Thai farm before had records and cost accounts been kept. Experimenting with Thailand's first tractor and many other labor-saving devices, he was his own mechanic.

Educator and researcher more than simple farmer, he helped neighbors follow his practices and offered his seeds. Young agriculturists in government became his ardent admirers. To share more widely his findings he founded *kasikorn*, still the only agricultural journal in Thailand. Associates in this venture were graduates of the College of Agriculture at Los Baños in the Philippines.

Recalled to Bangkok in 1932, Mom Chao Sithiporn served briefly as Director General of the Department of Agriculture. A lasting contribution was establishment of the first three upland experiment stations. Deposed by the *coup d'état* ending absolute monarchy and imprisoned as a Royalist, he was incarcerated mainly on Taratao Island for eleven years. For fellow inmates he gave lectures on upland farming which were later incorporated in a book. Released near the end of World War II, he was elected to Parliament from his home province and served as Minister of Agriculture for a short period until he was again deposed by a *coup*. A notable achievement was his vigorous attack on rinderpest. As head of the Thai delegation, he was elected Chairman of the FAO Rice Commission for three successive sessions.

His fortune exhausted but his spirit unbroken, Mom Chao Sithiporn and his wife returned to reopen their Bangberd farm. Finding it more than they could manage, it was sold in 1960 and a two hectare plot purchased near Hua Hin. There the Prince continues to grow vegetables, grapes and other fruits. Now 84 years of age, he maintains an active correspondence with agriculturists. In articles to newspapers, he vigorously defends the interests of Thai farmers, critically challenging government policies with the pragmatism of a man who knows the soil.

TUN ABDUL RAZAK BIN HUSSEIN

(1922-)

Tun Abdul Razak Bin Hussein, Deputy Prime Minister, who guides Malaysia's national and rural development, has been elected to receive the Award for Community Leadership. By this election the Board of Trustees recognizes a politician administering with quiet, efficient and innovative urgency the reshaping of his society for the benefit of all.

Molding diverse peoples into a nation and moving them from feudalism to modernity demands leadership possessed of a rare range of skills. Sound plans are needed. Malaysia's are designed to be translated promptly into more democratic economic well-being. Official management must be more than energetic; it must temper insistent pressure for performance by government and the private sector with astute awareness of what is possible at a given moment. At this level politics becomes both a science and an art. Tun Razak is its devoted practitioner.

Pahang State where Abdul Razak was born in 1922 is in the heartland of traditional Malay culture. Influenced by this setting and the career of this father, a hereditary chief and a senior member of the Malayan Civil Service, the alert young man grew to value the best from East and West. When his studies at Raffles College in Singapore were interrupted by the Japanese attack, Razak helped organize *Wataniah*, the Malayan Resistance Movement.

In England after the war, where he qualified for the Bar with distinction in half the usual time, Razak met Tunku Abdul Rahman. Soon fast friends, they and associates in the Malay Society of Great Britain were caught up in the excitement of independence for neighboring lands of the Empire. From the brutal tragedy accompanying partition of India and Pakistan grew the determination to cooperate with Chinese, Indians and others in making theirs a genuinely multi-racial nation with room for all faiths.

Back in Malaya, Abdul Razak became Deputy President of the United Malays National Organization and a leader of the Alliance Party that won over communal prejudice at the polls in 1955, thus hurdling the major barrier to independence. The youngest Chief Minister of a Malay State as *Mentri Besar* of Pahang, Razak resigned from the Malayan Civil Service to stand for election and won handily the seat from his home constituency. As Education Minister he joined in negotiations the next year in London that culminated in *Merdeka* on August 31, 1957. As Deputy Prime Minister and Defense Minister of Independent Malaya, he directed the war against Communist terrorists who rejected an amnesty and plea for peaceful cooperation in building the new nation. Winning villagers away from the insurgents, by July 1960 his government could proclaim the emergency ended.

Realizing that independence would prove a mirage without a new way of life for their people, the government embarked on bold development. Responsibility for planning and implementation reposed in a new Ministry of National and Rural Development headed by Tun Abdul Razak. Today some 140,000 acres of virgin land have been opened for 12,000 near landless families in 60 successful settlement schemes. Meticulously engineered, these new communities are complete with access roads, schools, teachers' quarters, water supplies, telephones, electricity, health facilities, public halls, shops and houses of worship. Each settler starts anew with eight acres planted to high-yielding rubber or oil palm, two acres for orchard, a house garden plot and a modest subsidy until his first income crop. For these he repays the government over a period of years.

Irrigation and drainage projects have increased five-fold acreage capable of being double-cropped in rice. On small and large holdings throughout the Federation agriculture is being diversified; production of livestock, fish and forest products has increased rapidly. Locally manufactured goods of many types have begun to replace imports. In urban centers are 13,200 new low-cost housing units. Combatting illiteracy and high population growth are well-attended adult education and family planning classes in cities and villages.

To support this vast enterprise, the Government trains intensively an ever increasing cadre of technicians and administrators. From his Operations Room, adapted from his earlier war room and duplicated in every State and District headquarters Tun Razak keeps constant watch on performance by each agency of government assigned responsibility for a share of the work. Scheduled and surprise inspection trips take him 60,000 miles a year. Often working 16 hours a day and living modestly, he expects and gets dedicated service from his subordinates. In his relentless drive to insure that clear plans become early reality, the inhabitants of the old *Kampongs* see their best hope for a new way of life in Malaysia.

SHIROSHI NASU

(1888-)

Dr. Shiroshi Nasu, who led Japan's farmers to share in world agricultural knowledge, has been elected to receive the Award for International Understanding, for his practical humanitarianism, enhancing cooperation in agriculture by learning through multinational experience.

Farmers the world over have much in common that knows no national boundaries. Everywhere they work hard, coaxing the soil to produce, watching the weather and battling a host of enemies from weeds to blight and insects. While officials and technicians meet often in scientific and other gatherings, farmers rarely have the opportunity to trade foreign insight, although their tilling of the land is "first among the arts" and essentially non-verbal. Dr. Nasu recognized this need and acted effectively.

His mother's love of nature and Tolstoy's philosophy emphasizing equality of man shaped Nasu's early values. Professor Inazo Nitobe's commitment to internationalism and better agriculture led his student, born into a Samurai family, to make these his life concerns. Graduated with honors in agriculture from Tokyo Imperial University, in 1914 he joined this faculty. But academic pursuits did not blunt his concern for the feudal inequalities that then stifled Japanese peasantry.

Surveying the plight of islanders in the Marshalls, Carolines and Marianas, Nasu recommended policies that helped improve their lot. In the 1920's, as advisor to the Japanese labor delegation to the League of Nations, he championed the right of tenant farmers to organize. Recognizing early the population and social problems on the land and the need for fair prices for farm products, he became a pioneer in these fields at home and abroad.

After Japan's defeat in 1945, Nasu's wartime role in establishing a School of Agriculture at Peking University, guiding emigrant settlement in Manchuria and advising the Nanking

puppet administration led to his exclusion from government for five years. As a private citizen observing the land reform being engineered by the Allied Occupation, he became concerned that farmers using antiquated methods might still fail to improve their living.

Kokusai Noyukai, or the Association for International Collaboration of Farmers, was the solution Nasu devised. An agreement signed in 1951 with the Governor of California set the pattern. At first 30 to 40 young men went annually to work for one year with host farmers, learning latest methods for raising rice, fruit, vegetables, flowers, poultry and dairy animals. Others later were sent to Denmark, Holland, Switzerland, West Germany, Canada, Brazil and New Zealand to learn by working and to build enduring ties of friendship. By now some 1,600 trainees have returned to apply their new knowledge of farming, marketing of produce and building cooperatives. On the average they have almost doubled their family income at home while leading in community betterment. They and their former hosts in Europe and America exchange, around the world, seeds, fruit trees and even breeding animals. Recently, returned trainees themselves became hosts to a first contingent of young farmers from Korea, Taiwan and Brazil.

When Dr. Nasu was appointed Ambassador to India in 1959, he thought again of sharing knowledge. Young Japanese who established demonstration farms in eight Indian states include nine trained abroad; the remainder are drawn from the two agricultural training centers for middle and high school graduates established by Nasu in 1929 and 1938. In Pakistan and elsewhere in Asia and Africa other teams are following this example. Near Agra, Dr. Nasu similarly involved his country's medical profession in creating the India Center of the Japan Leprosy Mission for Asia. At the inauguration he said this effort represented an expression of gratitude for early English and French missionaries who had labored to eradicate leprosy in Japan.

Now 79 years old, Dr. Nasu had lived true to his youthful vow: rather than seek personal gain he would devote himself to larger goals benefitting farmers, particularly the least fortunate.

SATYAJIT RAY

(1921-)

India's poet of the cinema, Satyajit Ray, has been elected to receive the Award for Journalism, Literature and Creative Communication Arts, for his uncompromising use of the film as an art, drawing themes from his native Bengali literature to depict a true image of India.

Millions in India could not in their lifetimes know the richness of their literary heritage because they are illiterate or too poor to buy books. To them and the world outside Ray is bringing films with a fidelity to this heritage and to life. Unlike the vast majority of Indian films which are escapist, he strives for emotional integrity of relationships. With a disciplined sensitivity and a painter's sense for the visual he probes the "struggles of an ordinary man trying to be good."

The cultural rebirth of Bengal has long been a family concern. His grandfather, Upendra Kishore Ray Chauduri, wrote folklore, pioneered in engraving and color printing and was a leader of the potent intellectual Brahmo Movement. His father, Sukumar Ray, a gifted cartoonist, wrote verse, especially for children, with buoyancy and humor and remains the most popular Bengali poet after Rabindranath Tagore.

Raised in this environment and schooled at Viswa-Bharati University at Santiniketan under Nandalai Bose, father of rival Bengali art, Ray first turned his talent to commercial art. His performance for a Calcutta advertising firm won him a trip to Europe. In London, seeing *Bicycle Thieves*, *Louisiana Story* and *Earth*, he "discovered" the visual potential of the film. Back home in Bengal, watching Jean Renoir make *The River* gave him a feel for production in this media.

"The time came when I felt I must make a film," Ray recalls. He remembered the Novel *Pather Panchali* (Ballad of the Road), a popular classic for which he had done illustrations. In October

1952, joined by eight technicians and actors, most of whom were amateurs, Ray began filming on weekends and holidays. Halfway through they were forced to halt for lack of money. Financial assistance from the West Bengal State Government finally permitted completion three years later.

Hardly a commercial success in India outside of Bengal, this film went on to win the Cannes Film Festival special award for "best human document" in 1956. A second production, *Aparajito* (Undefeated) in 1957 won the Grand Prix at Venice. The trilogy, later completed with *Apur Sansar* (The World of Apu), telling a story of childhood, youth and manhood in Bengal, won altogether 16 international awards—a singular achievement in world cinema.

In the Apu trilogy and his 11 other films and one documentary Ray has striven for realism and a genuine expression of India. Aware of his medium's potential and a director's responsibility as he chronicles transition in his society, he emphasizes positive values. His protagonists have faith. Their poverty is not of the human spirit but of circumstance. Sadness of life is there, and so is sheer joy living. The boy Apu recites poetry in the night. In *Jalsaghar* (The Music Room), a selfish feudal lord, resisting the new industrial age amidst the ruins of his crumbling estate with a solitary aging elephant, is redeemed by his love for music.

Equipment often has been inadequate, the budget stringent and the actors amateurs. But talent compensates. Writing his own scripts and sometimes composing the score, Ray, at the age of 45, has become a modern "Chekhov of films." With an artist's true concern for enduring human dimensions of life, he has deepened his people's understanding of themselves and elevated their horizons of what the individual can accomplish.

GOVERNMENT SERVICE

LI KWO-TING (Chinese), "for his vigorous, rational guidance of Taiwan's economy, generating one of the world's most rapid rates of industrial growth."

PUBLIC SERVICE

SEIICHI TOBATA (Japanese), "for his incisive contributions toward modernization of Japan's agriculture and the sharing of its experience with developing nations."

COMMUNITY LEADERSHIP

SILVINO and ROSARIO ENCARNACION (Filipinos), "for their scrupulous and zealous management of a credit cooperative that soundly improves life in their low-income *barrio*, without incurring bad debts."

INTERNATIONAL UNDERSTANDING

The COOPERATIVE FOR AMERICAN RELIEF EVERYWHERE, Inc. (American), "for its constructive humanitarianism fostering dignity among the needy in Asia and on three other continents over 22 years."

JOURNALISM, LITERATURE AND CREATIVE COMMUNICATION ARTS

TON THAT THIEN (Vietnamese), "for his enduring commitment to free inquiry and debate that gained added substance through his lifting of press censorship in Vietnam."

LI KWOH-TING

(1910-)

Li Kwo-ting, Minister of Economic Affairs of the Republic of China, has been elected to receive the Award for Government Service, for his vigorous, rational guidance of Taiwan's economy, generating one of the world's most rapid rates of industrial growth.

The career of a concerned civil servant never is easy. Yet, despite the tumultuous events that have overtaken China during his 58 years, Li has sustained through adulthood his commitment to help his people through effective government service. Schooled in his native Nanking and in England, Li returned to China in 1937 to teach physics. Within four years he was drafted to spur defense production in the remote interior where the Chinese maintained their resistance against the Japanese.

A gifted planner of China's postwar industrial rehabilitation, Li transferred his efforts to Taiwan as Communist armies seized the mainland. From organizing shipbuilding he rose to help plan the Island's industrialization. In 1958, he became responsible for coordinating U.S. economic assistance, so efficiently used by Li and his colleagues that by 1965 aid no longer was needed. Instead, through successive posts Li overcame internal resistance to chart sound policies attracting private domestic and foreign capital and management and international loans to share in an ever-expanding economy based on balanced encouragement of both agriculture and industry.

Spurred by government actions largely designed or actively supported by Li, Taiwan's foreign trade grew from US\$420 million in 1960 to US\$1,173 million in 1966. The Island became the world's leading exporter of canned mushrooms. Processing of other agricultural commodities has continually expanded. Increasing sales abroad of electronic components, chemicals, plastics and metal manufactures and appliances bespeak of growing

sophistication of industry. Over the past ten years the annual rate of industrial growth has averaged 13.8 percent.

Widely acknowledged as a model for agricultural modernization, complete with effective land reform, and of diversified industrialization, Taiwan is helping other developing countries. Nearly 4,000 foreign technicians in agriculture and industry have come to learn on farms and in factories. More than 30 teams of Chinese specialists now are working in some 20 countries in Africa, Asia and Latin America, sharing their experience.

As a chief architect and promoter of the industrial miracle that has emerged following the growth in Taiwan's rural productivity and buying power, K. T. Li has channeled national resources where they were most needed. With the cooperation of his peers he has shown that what counts more than material resources and funds for national development is enlightened and discriminating use of human skill and determination.

SEIICHI TOBATA

(1899-)

Seiichi Tobata, scholar and president of Japan's Institute of Asian Economic Affairs, has been elected to receive the Award for Public Service, for his incisive contributions toward modernization of Japan's agriculture and the sharing of its experience with developing nations.

The role of the scholar in encouraging the progress of his country is necessarily oblique since he must remain non-political. Observing, researching, writing and teaching, he senses both the total direction of organized enterprise and the hurdles that must be surmounted for accomplishment. Yet, winning for his findings officials acceptance and appropriate action becomes possible only as the man himself gains respect and masters the art of detached involvement. Professor Tobata's career has been distinguished on all counts, including his determination to shun wealth and public prominence.

Born on February 2, 1899, Mie Prefecture, Prof. Tobata as the son of a landowning family in his youth became attuned to the seasonal rhythm of farming. Whereas most young men of his circumstance aimed for high government position with its prerogatives, he chose to study and later teach agriculture at Tokyo University. Intent upon discovering how land use and crops had evolved elsewhere, he continued his education in England, Germany and the United States and returned to become a pioneer in agricultural economics.

As his scholarship won adherents, Tobata's advice increasingly was sought by fellow academicians, technicians and government officials. In this role he made important contributions to development of agricultural science and research and to charting Japanese agricultural policies.

Alert to the injustices and technologically crippling effects of a feudal land tenure system that the Meiji Restoration had left almost untouched, Tobata became a champion of land reform.

Attempted without success after the close of World War I, reform was thoroughly accomplished with support from the Allied Occupation after 1945. As the transformation awakened peasant initiatives, Tobata helped devise government action to promote basic democratic ideas through cooperatives, education and demonstration. The Japanese farmer's wife, known formerly as the "hornless cow," also became his concern as he worked for her liberation and acceptance as a full-fledged partner in family decision-making.

With the triumph of sound policies and technology that enabled Japan's farmers to support accelerated industrialization, Tobata turned his efforts to helping developing lands. Through the Institute of Asian Economic Affairs, he and his associates began assembling data both on their own experience and on actual potentials and problems facing farmers in Asia, Africa and Latin America. Sending abroad yearly more than 20 scholars to gather basic facts, the Institute is beginning systematically to provide information applicable in other lands. Now retired from teaching, Tobata devotes himself to encouraging understanding of the fundamental role of a healthy agriculture in prompting national and regional progress.

SILVINO AND ROSARIO ENCARNACION

(1910-)

(1913-)

Silvino and Rosario Encarnacion, treasurer-manager and chairman of the credit committee of Barrio Bantug Community Cooperative Credit Union, Muñoz, Nueva Ecija, have been elected to receive the Award for Community Leadership, for their scrupulous and zealous management of a credit cooperative that soundly improves life in their low-income *barrio*, without incurring bad debts.

Progress in any rural community begins with the people themselves, mastering the art of saving their modest funds and using them productively. This is true in Asia today as it was in Germany 104 years ago when, after failing to generate results with charity, Frederick Wilhelm Raiffeisen founded the first credit union among the depressed and starving of Heddendorf. Like the 28 English pioneers who started the Rochdale consumers union, these cooperatives appealed to elemental human nature; linking self-interest to community betterment. As cooperatives have grown, so has economic democracy.

Despite this promise, the Philippines like many Asian lands, is littered with the wrecks of mismanaged cooperatives that spawned popular disillusionment. It was against this handicap that Angel Mandac of the Philippine Rural Reconstruction Movement labored when he first came to Barrio Bantug in 1960 to arouse interest in a credit union. Silvino Encarnacion, a tailor by trade who then was Barrio Lieutenant, and his wife, Rosario, a public elementary school teacher, accepted the challenge, gradually enlisting responsive neighbors.

Starting in May 1960 with 17 members and 73 *pesos* in cash deposits, the Bantug Community Cooperative Credit Union now has 181 members and ₱26,447.52 in assets. Neither the largest nor the wealthiest among credit unions in the Philippines it is distinguished by its integrity and creativity. Most consequential are the changes members are prompting in their *barrio* of some

4,000 inhabitants. From chronic habits of dependence and borrowing from moneylenders to pay for illness, baptisms, rice until the next harvest and even gambling debts, Bantug is changing as residents learn to save and plan ahead. With capital from their own "bank" members of the credit union finance small businesses, improve their houses, pay tuition for children attending college and invest in better seeds and fertilizer. All of this was made possible by meticulous management of cooperative funds and emphasis upon productive loans based on the borrower's character.

Silvino and Rosario Encarnacion are proving that regardless of how modest is an individual's circumstance and discouraging the condition of his community, these can be altered. With associates in the Bantug credit union they are showing that barrio folk can be encouraged to learn new habits "releasing" them from old limitations to build the decent life all seek.

COOPERATIVE FOR AMERICAN RELIEF EVERYWHERE, INC. (CARE)

The Cooperative for American Relief Everywhere, Inc., known as CARE, has been elected to receive the Award for International Understanding, for its constructive humanitarianism fostering dignity among the needy in Asia and on three other continents over 22 years.

Giving relief is different especially when the goal is generating positive human response. The recipient readily comes to feel obligated, dependent and ill at ease about the relationship. The challenge to the donor is to fortify rather than inhibit self-reliance. Working wherever possible through local agencies in eight countries and two colonies of Asia, CARE has managed this delicate assignment with sensitivity and a continuing concern for long-term results.

Inaugurated in November 1945 as a cooperative of American private charitable and service organizations to send food parcels to the starving in war-ravaged Europe, CARE soon broadened its scope, changing the "E" to Everywhere. Discovering that an equal need was for the means to self-help, CARE aid began emphasizing plows, technical books and much else that man needs for his productive efforts. As food commodities became available from the U.S. Government, which also paid for most of the freight, CARE took responsibility for a vast international feeding program. In March 1962, MEDICO became a service of CARE adding a new dimension to the assault on hunger, poverty and disease.

Filipino children numbering yearly some four million in 27,000 elementary and pre-schools benefit from the free lunch program of CARE and the Bureau of Public Schools. Blending powdered milk and corn meal, teachers are distributing a nutritious supplement to guard the younger generation against the intellectually

numbing hazards that scientists have uncovered in a protein deficient diet. Sprayers for fruit and tobacco growers, 3,000 transistor radios distributed to barrios, wood working tools for vocational schools and vita-pops for orphans in institutions are but a few of CARE's contributions. In South Vietnam, war refugees are given soap, vitamins, textile packages and sewing kits by CARE and helped to become self-supporting with seeds, irrigation equipment, livestock and tools for carpenters, masons and blacksmiths. When famine threatened millions in India two years ago, CARE was among the agencies that helped with effective emergency food aid.

Representing now 26 agencies in America, CARE in the fiscal year ending June 30, 1967, distributed in 32 countries US\$99,194,128.00 worth of food, supplies and equipment. From its founding to date the volume has exceeded one billion dollars. Costs of administering this service were kept to approximately seven percent. Accomplishing this immense task with a modest budget and insuring integrity in use sets a standard for constructive relief. It also is heartening reassurance for the many in Asia who do benefit that others do care.

TON THAT THIEN

Ton That Thien, editor and now Minister of Information of the Republic of Vietnam, has been elected to receive the Award for Journalism, Literature and Creative Communication Arts, for his enduring commitment to free inquiry and debate that gained added substance through his lifting of press censorship in Vietnam.

Events engulfing Vietnam over the past three decades have compounded the dilemma of concerned intellectuals seeking sources for their national inspiration. Traditionally schooled in *Nho hoc*, Confucian learning, they were cut adrift from their origins by the system of education that accompanied French colonial rule. As this elite was oriented toward France it lost touch with the peasantry and left them vulnerable to Communist persuasion.

Minister Thien, by contrast relentlessly has sought to digest the essence of Western scientific method and wed it to Vietnamese cultural values. Freedom of thought and expression he found were essential to this pursuit. His convictions led him to act with perceptive courage and staunch individualism as writer and editor, professor and government official.

Born at Hue, Central Vietnam, in 1924 Thien from early youth was steeped in the history and classical teachings of his country. After World War II, he earned a degree at the London School of Economics. Graduate work at the Institute of International Studies in Geneva was interrupted by a call to join the Vietnamese delegation at the 1954 Conference that led to independence for his country.

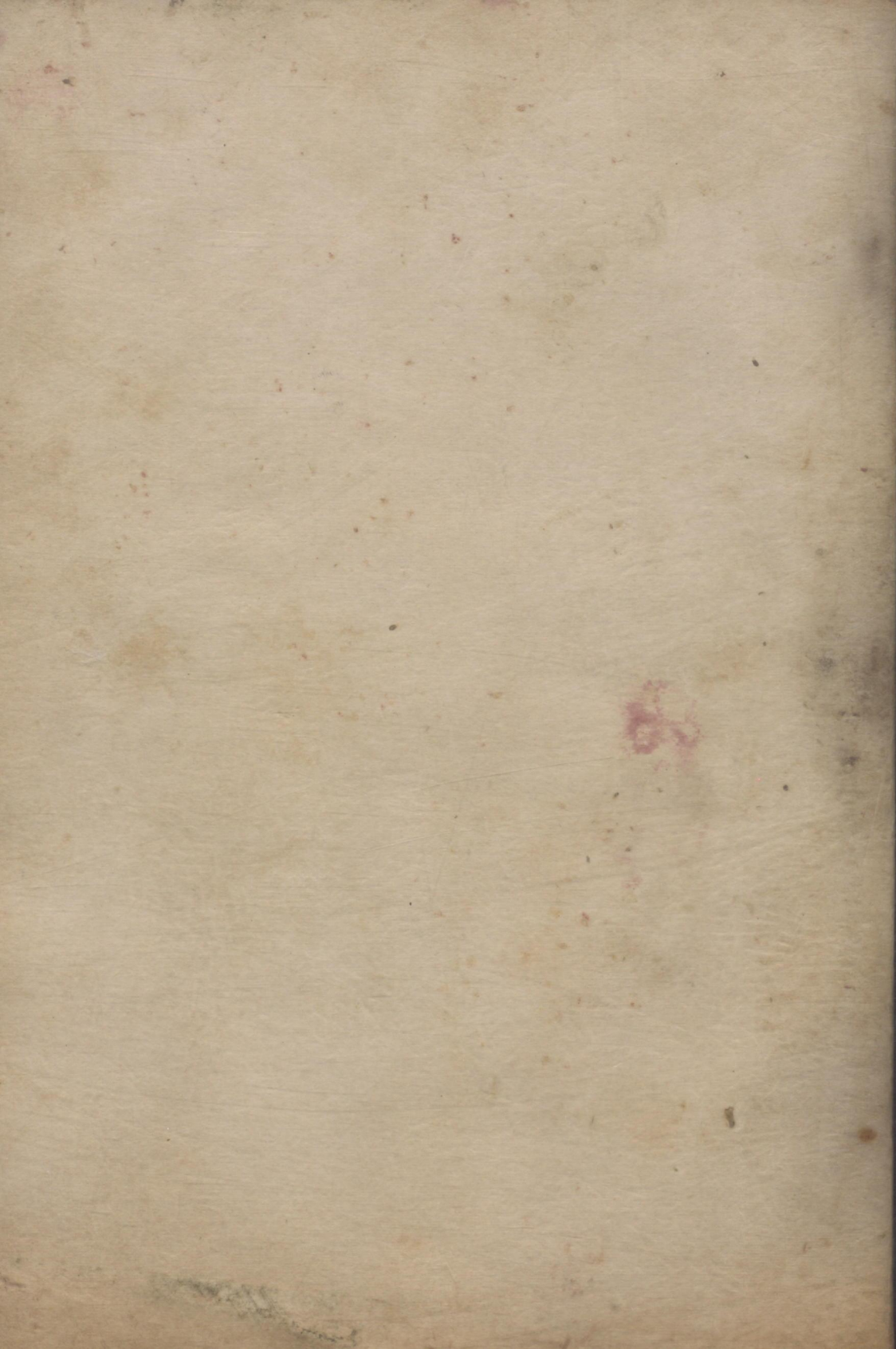
Thien enlisted promptly in the new government in Saigon serving as Presidential Press Secretary. Differing later with the authoritarian conservatism of the Diem regime, he left to complete doctoral studies in Geneva. Unlike other disaffected idealists who found haven abroad, he returned, in 1963 to serve as Director General of Viet Nam Press. Moving to private journalism as a political columnist on the *Saigon Daily News*, he went on to found with like-minded colleagues the *Viet Nam Guardian* becoming its managing editor.

When the *Guardian* was suppressed in December 1966 Thien continued to write for the London *Economist*, *The Far Eastern Economic Review*, and Forum World Features among others. He also taught and in 1967, became Vice Dean of the Faculty of Social Sciences of Van Hanh University where he helped organize the study group that is probing Vietnam's past for guides to the present.

With appointment of Tran Van Huong as Premier in April 1968 signalling more popularly responsive government, Thien accepted the post of Minister of Information. His first act upon assuming office was to lift press censorship, explaining: "Why have 25,000 Americans and more than 100,000 Vietnamese died in this war, if not for freedom?"

Amplifying his reason, Thien said: "Many people thought I abolished censorship because I was a victim of it, but there is more to it than that. My job is to educate the public as well as government officials. For too long a privileged minority has held a monopoly on enlightenment in this country, I want to change that."

Thien's concern goes beyond form. His aim is to introduce the scientific attitude not only to his country's educated elite but to the peasantry as a means of modernizing life and making society more equal and just. But science, he insists, must only be the means—the values it serves must remain supreme.



Ramon Magsaysay Award Foundation (1981) The 1971 Ramon Magsaysay award for community leadership: Monkombu Sambasivan Swaminathan. Carmelo & Bauermann Printing Corporation, Manila. p. 174-193.

THE 1971 RAMON MAGSAYSAY AWARD FOR COMMUNITY LEADERSHIP

MONCOMPU SAMBASIVAN SWAMINATHAN

Citation read by Dr. José V. Abueva, Trustee, Ramon Magsaysay Award Foundation:

Whether India, with nearly one-sixth of the human race, can provide sufficient food for her growing numbers in the years ahead depends ultimately upon her farmers. Their performance is closely linked to what science develops and makes operative in rural life. Without continuing refinement of relevant knowledge and its efficient transference, especially to the poorer villages, the "green revolution" may foster more discontent than it satisfies.

In an age when radioisotopes, a Gamma Garden and chemical mutagens are among the plant breeders' tools, Dr. SWAMINATHAN is an originative follower of Gregor Johann Mendel, the Austrian monk and botanist who founded genetics over a century ago. A cytogeneticist, in the past 16 years he had made major advances in breeding sturdier, more productive and better quality plant types at the Pusa Institute, as the Agricultural Research Institute outside of Delhi is popularly known. Included in the wide-ranging studies by him and his associates have been India's most essential food crops—wheat, rice, maize, sorghum, millet, pulses, potatoes and vegetables oils—plus cotton and jute. By purposeful manipulation of genes, he and his co-workers in 1967 developed a dwarf, non-lodging wheat variety—Sharbati Sonora, with amber grains—from Sonora-64 which has red grains and hence a low consumer preference in India.

An ability and enthusiasm for passing on his knowledge to others in the laboratory, classroom and field, and his prolific writing have earned him a reputation as a most lucid educator. In the past five years since he became Director of the Institute, SWAMINATHAN has proven himself an equally gifted administrator.

Encouraged by him, scientists at Pusa extended their work to practical application in farmers' fields. University students were enlisted in this attack upon the limitations to a better life on the land. The primary demonstration arena for these efforts are villages around Delhi where tests of

improved seeds—by farmers with whom the Pusa Institute cooperates—have won confidence in their productive potential. As part of a High-Yielding Varieties Program designed by SWAMINATHAN one community was transformed into a “seed village” specializing in controlled multiplication of improved varieties to supply the needs of the entire state, and thousands of demonstrations were laid out by scientists in farmers’ fields throughout India.

His particular combination of talents has made SWAMINATHAN an acknowledged leader of India’s community of agriculturists. Now 46 years of age, he is carrying forward his Madrasi family tradition of energetic personal emphasis upon professional excellence. That he is doing so with such broadly beneficial results for rural India is the mark of a first-rate scientist who is also a humanist.

In electing MONCOMPU SAMBASIVAN SWAMINATHAN to receive the 1971 Ramon Magsaysay Award for Community Leadership, the Board of Trustees recognizes his contributions as scientist, educator of both students and farmers, and administrator toward generating a new confidence in India’s agricultural capabilities.

RESPONSE by MONCOMPU SAMBASIVAN SWAMINATHAN

I deem it a very great honor and privilege to have been chosen for the Community Leadership Award instituted in the memory of one of the greatest world leaders and humanists of our time. The late President Ramon Magsaysay devoted his tremendous vision, wisdom and energy to the cause of helping his fellowmen build a better life for all. A satisfied stomach is a prerequisite not only for happiness but even to enable men to behave as human beings, a fact so well expressed by the Roman philosopher, Seneca, when he said, “A hungry people listens not to reason nor cares for justice, nor is bent by any prayers.” Even as recently as the mid-sixties, the future of many of the developing nations appeared hopeless when assessed in terms of their ability to feed their fast growing populations. Drs. William and Paul Paddock, in their book *Famine Nineteen Seventy-Five!*, even went to the extent of comparing the fate of my countrymen after 1975 to that of sheep being led to the slaughterhouse. Then came the avalanche of scientific results from this great country, Mexico, Taiwan and India which opened up altogether new vistas in the yield potential of our major food crops. I consider this award as a tribute which the Magsaysay Foundation would like to pay to the entire community of agricultural scientists in my country who have helped to provide a breathing spell during which efforts can be made to prove the prophets of doom false.

New concepts of crop planning and land use, designed to get the maximum benefit from the physical, biological and environmental endowments of tropical and subtropical agriculture, are being developed. Where there is water four or even five crops can now be grown in a year in multiple, mixed and relay cropping systems, getting for the farmer the benefit of nearly 450 days of crop growth in a year of 365 days. New methods of water management and enrichment of soil fertility, coupled with crop varieties capable of avoiding the rigors of drought or floods through changes in their life length and coordinated pest control schedules, are opening up new hopes for peasants working in environmentally handicapped areas. The "green revolution" in cereals has paved the way for developing harmonious systems of agriculture and animal husbandry.

The scientific prospects for alleviating hunger, increasing the avenues for productive and remunerative employment, and banishing poverty through a radical transformation of cropping systems leading to the growth of agro-industries, are fascinating and immense. At the same time the magnitude of the problems of illiteracy, under- and malnutrition, under- and unemployment and population growth are truly staggering. In spite of all efforts, the number of illiterates in absolute terms is growing in many parts of Asia, including India. Leading scientific journals carry data indicating that protein calorie malnutrition in infants may affect the replication of the chemical substance of heredity, DNA, and lead to an irreversible underdevelopment of a child's intellectual potential, thus compounding the ill effects of the already poor educational opportunities.

The Indian achievement in wheat production, leading to a near doubling of the total harvest from a little over 12 million tons to over 23 million tons in four crop seasons, has few parallels in recorded agricultural history and serves to illustrate what can be accomplished provided farmers, scientists, extension and communication experts and political and administrative leaders, all function like members of a symphony orchestra. Unless such an orchestration in effort is generated for all crops, a scientific breakthrough may not necessarily lead to a production breakthrough. This is illustrated by the yield stagnation in sorghum in my country where, although new hybrids and varieties capable of yielding two to three times more than the earlier ones have been available since 1964, the yield per hectare has hardly altered in the last decade. Wheat posed fewer pest, management and marketing problems and the farmers responded with enthusiasm to produce as much or even more than what was harvested in the National Demonstration plots put up by scientists in the fields of poor peasants. In other crops like rice, sorghum, maize, millets and pulses, problems of management, pest control, storage, marketing and pricing require sophisticated and coordinated efforts of a type which few developing nations have yet generated. Consequently, a genuine feeling that they have been bypassed by the "green revolution" is growing in the minds of many farmers.

We are thus faced on one side by great scientific possibilities and on the other by vast problems of organization, coordinated action, communication, and population growth absorbing the fruits of all advance. Those who have the power and capacity to serve their fellowmen—be they scientists, educationists, administrators or political leaders—have probably never had in human history so many challenging opportunities for service and for experiencing the thrill of fulfillment. What is needed is the will to act and the determination to learn and adopt the correct techniques of action, since Asian farmers have given ample evidence in recent years that they are ready for change if the change is for the better economically.

I would like to end on a personal note. When over 10 years ago my colleagues and I at the Indian Agricultural Research Institute embarked on the relentless pursuit of high incomes from farming through high yields—without detriment to the long term productivity of the soil—we hoped that the high yielding varieties would not only help raise production but would also act as catalysts in bringing about a total transformation in the outlook and agronomic methodology of our rural community. Where sights are limited, action is equally circumscribed and cynical comment is the only reception accorded to new ideas. Mahatma Gandhi referred to this situation over 40 years ago, when addressing those who wished to work in Indian villages. He said, "The fact is the villagers have lost all hope. They suspect that every stranger's hand is at their throats and that he goes to them only to exploit them. The divorce between intellect and labor has paralyzed our agriculture. The worker should enter villages full of love and hope, feeling sure that where men and women labor unintelligently and remain unemployed half the year round, he working all the year round and combining labor with intelligence cannot fail to win the confidence of the villagers." I have had the privilege of personally experiencing the wisdom of Gandhi's recipe. Hence, while accepting the Award for Community Leadership bearing the name of one, whose main characteristic was his passionate love of poor people, I plead in all humility with the young men and women in the universities and scientific institutions of the developing nations to seize the opportunity and power, given them by science, to make real the possibilities of a truly human and meaningful life for millions of their fellow beings. It is to promote this cause that I propose to use the Award.



M. S. Swaminathan

MONCOMPU SAMBASIVAN SWAMINATHAN

"The principles of self-reliance, love towards all and community effort were inculcated in me during the first 10 years of my life," MONCOMPU SAMBASIVAN SWAMINATHAN writes. Born on August 7, 1925 in Kumbakonam in Madras State, South India, he was the second son of Surgeon M. K. Sambasivan and Parvathi Thangammal Sambasivan. "I learn't from my father," he adds, "that the word 'impossible' exists mainly in our minds and that given the requisite will and effort, great tasks can be accomplished."

He recalls how his father, a follower of Mahatma Gandhi, took the lead in their area in "burning his foreign clothes," a symbolic act in support of the *swedesbi* movement which emphasized the use of Indian rather than foreign-made clothes, and handloomed rather than mill-spun cloth. The purpose of *swedesbi* was to free India from dependence on foreign imports and to protect village industry. His father also led in opening the temples to "untouchables," and in eradicating filariasis in Kumbakonam, an area long infected with the dread disease. The sense of service to one's fellowman was thus ingrained in him early.

After his father's death when he was 11 young SWAMINATHAN was looked after by his uncle, M. K. Narayanaswami, a radiologist. He attended the local high school and later the Catholic Little Flower High School in Kumbakonam, from which he graduated at age 15. He went on to get his Bachelor of Science in Zoology from the University of Travancore (now Kerala University) in 1944. At that point he decided to take up the study of agriculture.

He had spent his holidays in the "rice bowls" of Kerala and Tamil Nadu and yet had been struck by the paucity of the grain yield and the poverty of the farmers. In contrast he noticed that plantation crops—coffee, rubber, tea—produced well in the same soils and conditions. His observations awakened his interest in agricultural problems and he read widely, discovering that yields in India were very low compared to those of other countries. "The interaction between heredity and environment fascinated me," he later said, "hence in 1944 I decided to take to agricultural education, and since then I have developed what my wife, Mina, says is a 'single track mind,' concerned with problems of improving agricultural productivity and agrarian prosperity."

He received a Bachelor of Science in Agriculture from the University of Madras in 1947 and did postgraduate work at the Indian Agricultural Research Institute (IARI), from which he received an Associate Diploma (with high distinction) in Cytogenetics two years later. He passed the Indian Administrative Service examination and was offered a post in the Indian Police Service and at the same time was advised that he was the recipient of a United Nations Education, Scientific and Cultural Organization (UNESCO) fellowship to study abroad. Choosing to pursue his studies rather than accept a government position he was, from 1949 to 1950, a UNESCO Fellow at the Institute of Genetics of the Agricultural University of Wageningen, the Netherlands. From there he proceeded to Cambridge, England, where he received a Doctorate of Philosophy in 1952 for his thesis *Species Differentiation and Nature of Polyploidy in Tuber-Bearing Solanum Species*. It presented an "entirely fresh concept of the relationships within the tuber-bearing *Solanums* [potatoes]."

To broaden his experience before returning home he accepted an appointment as Research Associate in Genetics at the University of Wisconsin in the United States, November 1952 to January 1954. There he continued his work on the potato, publishing nine papers during the next three years in American and European journals based on the results of his experiments on the *Solanum* species.

Back in India he took a position as Assistant Botanist at the Central Rice Research Institute in Cuttack, Orissa State, where he worked at crossing japonica and indica varieties of rice in an effort to produce a high-yield strain. Six months later he transferred to the IARI in New Delhi where he had done his first postgraduate work. Beginning as Assistant Cytogeneticist, he served as Cytogeneticist (1956) and Head of the Botany Division (1961) before being appointed, in July 1966, as Director of the Institute.

Agriculture has employed, employs and will have to continue to employ about 70 percent of India's population. Until a gift of \$30,000 was made by U.S. philanthropist Henry Phipps in 1905 there was no important research institute devoted to the scientific study of this major aspect of Indian life. That year the Pusa Institute, to become the IARI, was founded in the village of Pusa in northern Bihar State. The Institute had five sections: agriculture and cattle breeding, chemistry, economic botany, entomology and mycology. Pioneering research work was done in these fields and at this location until, as a result of the disastrous 1934 Bihar earthquake, the Institute was relocated in 1936 in New Delhi where it now occupies 1,250 acres.

The Institute, which SWAMINATHAN heads, is under the Central Government Ministry of Food and Agriculture. It has a teaching staff of 265 and consists of 17 divisions. There are also a number of Institute-related regional stations and substations in other parts of the country which are

devoted specifically to research on wheat, cotton, oilseeds and vegetable crops; seed production; plant introduction, and viruses. There are also three soil correlation centers. In 1958 the IARI was recognized as a university and now offers both graduate and postgraduate degrees. It cooperates on research projects with various state, national and international agencies and foundations, e.g., departments of agriculture of the various Indian states, the Central Rice Research Institute at Cuttack, the International Atomic Energy Agency, and the Ford and Rockefeller foundations. SWAMINATHAN has played a major role in the development of the IARI into one of the world's leading agricultural research and educational institutions.

Research and teaching facilities and modern laboratory equipment at IARI attract students from all over the world, but especially from South and Southeast Asia. It has the largest agricultural library in India with 200,000 books and 1,500 scientific journals, Indian and foreign. Its collection of over 22,000 insect specimens constitutes a valuable asset for work in systematic entomology—making possible the identification of pests, their parasites and their predators. It also has over 27,000 specimens of fungi which form the basis for the study of fungoid plant diseases and the possibility of their control. The Indian Type Culture Collection of Microorganisms is the largest in the country. The germ plasm bank which has been built up by IARI for wheat, maize, sorghum and millet is utilized by scientists worldwide.

A Radiotracer Laboratory was established which includes "a Gamma Garden with 200-curie source and a gamma cell with a 2,000 curie source of radioactive cobalt-60." This is used in the program of mutation breeding by researchers from all parts of India. In 1968 a Nuclear Research Laboratory to expand this work was set up with assistance from the United Nations Development Program Special Fund.

IARI also has an excellent collection of ornamental plants, especially roses which number nearly 1,000, and it maintains a herd of Sahiwal and Freisian milch cows for milk-yield testing.

The major functions of the Institute are: "1) fundamental and applied research in agricultural science and related disciplines, 2) postgraduate instruction leading to the MSc and PhD degrees and 3) advisory and extension work." Research has been expanded to include not only the study of plants and factors necessary for their optimum growth, but improvement of storage techniques, development of soil test kits for use by farmers and designing improved but simple agricultural implements.

Education has been a main function of the Institute since its founding. SWAMINATHAN has refined the educational goals to "relevance" to the Indian economy and "excellence." Postgraduate training is based upon the credit-course system of American universities, SWAMINATHAN writes:

"research, teaching and extension are fully integrated and . . . instruction is broadbased so as to give the student a mastery not only in his major field of specialization but also in supporting minor fields." More than 2,000 applications a year are received but only 150 applicants are accepted. Preference has always been given to nominees of state agricultural universities. Courses are tailored to meet student requirements as well as community needs.

Between 1958 and 1970 the IARI graduated more than 720 Masters of Science and 600 Doctors of Philosophy. Over 50 of these took their degrees under SWAMINATHAN. His impact as an educator is felt throughout India and in other parts of the world. Those trained in the "SWAMINATHAN school of radiation genetics and plant breeding" are themselves beginning to make meaningful contributions.

"The ultimate aim for all agricultural research," SWAMINATHAN states, "is to bring the results of research within the reach of the cultivator." This is accomplished at IARI by advisory services, by supplying farmers with pure seeds of improved crop varieties, and by operating an extensive demonstration cultivation scheme in a number of villages around Delhi. One village has become a "seed village" that can supply seed to the whole state.

In 1964 SWAMINATHAN helped to develop the National Demonstration Program and in 1965 the High Yielding Varieties Program. By 1967 there were 2,000 demonstration farms laid out by scientists throughout the country to show the farmer new varieties, new yields and new techniques. SWAMINATHAN feels that these farms also educate state agriculture extension workers and are good training ground for agriculture students who should be required to work on them as a prerequisite to a degree. This extension program has a feedback advantage as well, shortening the time between recognizing a problem in the field and solving it in the laboratory.

SWAMINATHAN not only administers this complex university-research center, but is himself actively engaged in highly original genetic research, as a cursory glance at his more than 250 published papers will show. His training and major work is in cytogenetics, a branch of biology that deals with both cytology—the study of the variation of organisms by structure, function, multiplication, pathology and life history of the cells—and genetics, i.e. heredity, and the way to improve plant qualities by manipulating genes to redesign the plant structure. He has pursued the study of chromosome breakage and induced gene mutation—by means of X-ray; gamma ray; alpha ray; radio-active sulphur, phosphorus and cobalt; fast and thermal neutrons; ultra violet rays; or chemical agents such as ethyl methane sulphonate, nitrogen mustard and vegetable oils—in seeking to restructure major Indian food plants to increase both total yield and consumer quality.

Genes are located on chromosomes—rod-like bodies occurring in the nucleus of cells—and are transmitted from parents to progeny in a predictable fashion. Mutations in genes occur in nature at the rate of approximately one-to-one million and only a few are useful to breeders. Until 1927 man had to hope that he would happen on the million-to-one mutation that would be of help. In that year two American geneticists established the science of radiation genetics by using X-rays to induce mutation. Since World War II it has been possible to do intensive genetic manipulation with the use of atomic and nuclear technology. Breeders can now create “gene banks” and develop numerous new gene combinations according to plan and need. Furthering the possibilities of gene manipulation is the recent work of SWAMINATHAN in “purposeful direction.”

In August 1968 he announced at the Tenth International Congress of Genetics in Tokyo that pulse treatments with potent chemical mutagens at different stages in chromosome development in the replication of DNA (the nucleic acids that are the molecular basis of heredity) could help alter the mutation spectrum. His work is based “on the principle that DNA synthesis along a chromosome is not synchronous, thereby an opportunity exists for affecting different parts of the chromosome differently through short duration treatments.”

The ability to breed new “management-responsive plant types” has given agriculture a chance to catch up with the world-wide population boom since World War II. Modern science and international aid had prompted even the most underdeveloped nations to practice “death control” before they upgraded their economies or inaugurated “birth control.” The result was tremendous pressure upon food supply. Concerned Western thinkers (e.g. Gunnar Myrdal, *Asian Drama*; and Paul and William Paddock, *Famine Nineteen Seventy-Five!*) predicted that India, in particular, would be facing massive starvation in the 1970s. After failure of monsoon rains in 1965 and 1966 with resultant severe drought, widespread famine was only alleviated by huge importations of aid grains. That predicted massive starvation did not recur in the 1970s, and that a revolution has taken place in Indian agriculture and in the Indian farmer’s outlook, have been largely the result of the National Demonstration Program (1964-65) and the High Yielding Varieties Program (1965-66) of the IARI. SWAMINATHAN was the principal scientific architect of these programs and his role in generating a positive outlook among political and administrative leaders has been critical.

Rice is the main food crop of India, with about 34 million hectares planted to that crop today; wheat production is about half that of rice. Although food-grain production in India increased from 50 million tons in 1948 to 82 million by 1964, this was primarily due to an increase in land under cultivation, not in yield per hectare, and land opened for cultivation was chiefly marginal or forest land. These lands soon showed signs of soil

erosion and nutrient depletion, potentially increasing the problem of increased food production rather than solving it.

The first attempts to improve grain yield were with rice; simple demonstration farms were set up by the government around the country to try to persuade farmers to use fertilizer. The farmers proved reluctant even when the fertilizer was supplied free, and popular wisdom blamed "peasant conservatism." The data produced from these trial farms, however, showed that neither the addition of fertilizer nor proper irrigation made a significant yield difference. Since the japonica variety of rice grown in Japan produced a yield four times greater than the indica grown in India, attempts were then to make a cross of the two varieties that would utilize fertilizer more efficiently. SWAMINATHAN worked on this project at the Rice Institute in Cuttack. This approach also by and large failed.

SWAMINATHAN began the study of wheat when he came to IARI in 1954, publishing a paper on the "Effect of Fast Neutron Radiation on Einkorn Emmer and Bread Wheats," as early as 1956. Indian wheat, he found, like rice, did not respond favorably to the addition of fertilizer and water. In both cases tall stalks made the plants susceptible to lodging (falling), even under normal growing conditions. The addition of fertilizer and water simply increased the height of the stalk and its inclination to lodge, and encouraged the viruses and fungi preying on it. Since an important consequence of lodging is the delayed maturity of the grain, and in the semi-desert conditions of the major wheat farming areas of North India maturity is always a race with the approach of the plant-searing heat, and soil and atmospheric drought of April, the development of a nonlodging variety of wheat seemed essential for increased yield.

SWAMINATHAN became convinced that local grain varieties, developed over the centuries by natural selection, had adapted to survival under poor soil and climatic conditions, and were structurally and physiologically unable to produce an improved yield. In 1961, as Head of the Plant Breeding Department of IARI, he wrote the government that the answer to yield breakthrough was the introduction of dwarf varieties of grains. With a short, strong stalk, plants would resist lodging, nutrients would be used in seed production rather than in plant growth, and the flat sturdy leaves of the dwarf would maximize photosynthesis and speed maturity. Dwarfs could also be planted closer together, minimizing weed growth and increasing moisture retention.

In 1963, with the help of the Rockefeller Foundation and the Mexican Ministry of Agriculture, SWAMINATHAN effected the introduction into India of breeding samples of dwarf wheats which had been developed in Mexico by Dr. Norman Borlaug and his associates. These were based on the dwarf genes of the Norin wheat discovered in Hokkaido, Japan in 1946 and developed in the United States at the state agricultural college in Pullman, Washington, from where they were made available to the Inter-

national Center for Maize and Wheat Research (CIMMYT) in Mexico. During 1963-64 these Mexican wheats were studied at the Institute, at stations in six Indian states and by scientists at the agricultural universities at Ludhiana and Pantnagar. Bulk quantities of four commercial Mexican dwarf wheats were also imported for yield evaluation. During 1964-65 further and more extensive studies were made at IARI, and the National Demonstration Program was begun under SWAMINATHAN's supervision.

Believing that the purpose of research was to pass on the benefits to the farmer at the earliest possible moment, SWAMINATHAN designed a program to show villagers the yield possibility of these new varieties by growing them in farmers' fields. He insisted demonstration crops be planted in the poorest farmers' fields, with no controlled plots for comparison. The farmer, he reasoned, knows what he has traditionally harvested and the scientist knows what can be grown under optimum conditions. The demonstration was to show what an ordinary farmer could grow given these new grains and production techniques. The first results showed a tripling of yield.

As a result of the Program two varieties, Lerma Rojo 64A and Sonora 64 were approved by the Central Variety Release Committee of the Government of India for cultivation in irrigated wheat districts. Some 250 tons of these two varieties were planted in 1965 and 18,000 tons in 1966. By 1968 over 200,000 hectares were planted to these new dwarf wheats and the varieties that had been developed by selection from the advanced breeding material from Mexico. Pusa Lerma and Sharbati Sonora, two-gene dwarfs, were developed from Lerma Rojo and Sonora 64 by mutation breeding when farmers objected that the latter's red grain had a low market value.

The four-pronged strategy consisting of a) direct introduction, b) selection from advanced breeding material, c) hybridization and d) mutation breeding, devised by SWAMINATHAN, had speedy impact. In 1968-69 wheat production went up to 19.5 million tons from 12 million tons in 1964-65. The Indian Society of Genetics and Plant Breeding credits SWAMINATHAN with "overcoming the apparent ceiling to wheat yields in the country" by grasping the potentialities of the dwarf genes and putting his ideas into effect.

A great advantage in wheat development in India, SWAMINATHAN has written, is that the wheat program began after the country had embarked upon basic scientific development. The rice program, begun earlier, has not had as successful a breakthrough as wheat. On the other hand the need to improve rice yield was not as pressing since India is normally self-sufficient in this crop. Thus, any increase in rice yield per hectare, SWAMINATHAN comments, must be accompanied by a decrease in the total number of hectares planted if a surplus is not to occur. Since there are as

yet insufficient storage facilities, a surplus would result in a price drop and financial ruin for the farmers. However, SWAMINATHAN sees a time when India will have solved storage and pricing problems, as well as have achieved a yield breakthrough and will export rice to other parts of Asia. For this purpose SWAMINATHAN initiated a program of developing a dwarf rice variety with fine grains.

Wheat is another matter; India has had a chronic wheat deficiency. For many years India was a major wheat importer under U.S. Public Law 480. In 1965-66, as a result of drought—which in most wheat areas occurs on the average of every three years—India imported about 10 million tons per year.

Along with developing improved wheat varieties with increased yield and disease and pest resistance, SWAMINATHAN has been involved in promoting multicropping and scientific crop rotation. The most important reason for multiple cropping is that, since most available land is already under cultivation, there are only two ways to increase farm production and farm income: increased yield per crop and crops per hectare. Or as SWAMINATHAN puts it, "increased yield per day." Moreover, India must change its emphasis from "agriculture planning for self-sufficiency" to "agriculture planning for economic growth and agrarian prosperity." Agriculture must be the underpinning of the economy as it has been on Taiwan. "It is still not fully realized," SWAMINATHAN writes, "that the serious poverty, unemployment and underemployment problems facing India can be overcome only through the scientific exploitation of the plant and animal wealth of the country and that agricultural development is not merely a tool for achieving food self-sufficiency but is the most feasible and speedy method of economic growth." India, he continues, must plan to support 70 percent of her population and underwrite the cost of industrialization by exporting food to other parts of the world not as favorably endowed with land and climate: "Export of agricultural produce is like exporting sunlight, since agriculture is the most important solar energy harvesting enterprise in the world and India is blessed with abundant sunshine."

The best way to increase both agricultural employment and agricultural income, SWAMINATHAN believes, is by the continuous use of land, the number of plantings dependent only upon the availability of water. Two hectares of irrigated land, he estimates, will have to provide a reasonable income and continuous employment for over five persons for the foreseeable future. It is necessary, therefore to "delink agricultural fortunes from the monsoon."

Multiple cropping is a possibility unique to the tropics and subtropics, since only these geographic areas have sufficient heat units, sunlight and water. Studies have found that "no other country the size of India has so much irrigation potential available for raising crops," SWAMINATHAN has

written. The only areas lacking that potential are the dry-farming regions. Even there IARI is experimenting with the possibility of a second crop by developing short-growth-duration wheat and experimenting with ridge-furrow planting.

In irrigated wheat regions IARI has been experimenting with possible multiple crop combinations since 1966-67. One workable mix is wheat-mung bean (a legume that puts nutrients back into the soil)-maize-potato. There are a number of variables that must be considered in multiple cropping however: crop, soil, climate, topography, water and the input mobilization potential of the farmers, plus the problems of pests and diseases, credit, storage and pricing. One cannot develop generalized know-how for agriculture as for industry. Each area—often each village—must be treated differently.

IARI studies have shown that in irrigated wheat areas 10 tons of crop per hectare per year are possible with relay cropping, but improved management technology must go with improved stock to achieve these high yields. Studies on tillage show that four crops will grow better on 4-5 ploughings than one crop with the traditional 15-20 ploughings. Addition of nitrogen and phosphorus is a must on most of India's soils, and introduction of the nodule bacteria *Rhizobium* will allow leguminous plants to fix more nitrogen. Water management is important—including amount, time of application and use of raised plant beds which can effect 35-40 percent saving of water and allow simultaneous double cropping if desired—and disease and pest control. Major grain loss occurs in post-harvest storage; studies show that low moisture, temperature and oxygen in storage are essential for maximum retrieval. Pricing is also important and the farmer must learn to figure profit on "net return per unit area" not on gross return of yield.

Many of these findings are the result of studies of the past 30 years, but the IARI, under the leadership of SWAMINATHAN, has realized the necessity for presenting them as an integrated package, showing the farmer their essential interrelationship and convincing him of the need for proper input from all to achieve optimum results. In his position as Director of IARI, SWAMINATHAN has lent his scientific talents, his administrative abilities, his capacity to convince political leaders and his power as a widely respected writer, speaker and teacher to make sure that all necessary ingredients are in the "package" before the farmer is encouraged "to buy."

Believing as he does that desired advances in agriculture can come about only if agriculture is treated as a whole, SWAMINATHAN has not only been a motivating force in the establishment of various multidisciplinary efforts, but he has written widely in the general field of agronomy for both agriculturalist and layman. For example, in 1956 in two articles in *Indian Farmer* he discussed the new vistas in plant production, and in

1967 he wrote for *Farmer and Parliament* and the *Indian Journal of Public Administration* on "New Crop Varieties and New Yield Possibilities," and "Integration and Application of Agricultural Research, Education and Extension," respectively.

Besides attempting to educate agricultural experts and government officials, SWAMINATHAN is very concerned about educating the individual farmer. He urges that government exploit mass communication media to inform the farmer as to both new yield and crop possibilities and attitudinal changes that must accompany the new technology. All-India Radio with the help of IARI put on an experimental agriculture-education television program that reached 72 villages in Delhi State in 1967. It proved "a powerful tool for dissemination of knowledge." Farmers, not surprisingly, retained more of what was presented through television than they did through radio. As a result SWAMINATHAN is urging that a satellite television system, with ground stations capable of covering all the villages in the country, be installed as soon as possible.

SWAMINATHAN also believes in educating the farmer to make his own decisions. He does not support either coercing or coddling the farmer. "I personally feel," he wrote in 1964, "that psychologically, the subsidy given to the farmer does more harm than good. It takes away his initiative. The farmer may be provided with seed, fertilizers, improved implements, etc. against full credit rather than at subsidized rates." This should "yield better results as the farmer tends to appreciate and use more efficiently the seeds and fertilizers he has purchased at good price." He therefore urges the government to make farm credit available as quickly and as broadly as possible.

SWAMINATHAN elaborated on this basic premise when he was asked to deliver the prestigious Zakir Hussain Memorial Lectures in September 1970. Psychologists, he said, believe that within each of us there dwells a captive spirit struggling to find fulfillment, and each has the need to succeed by his own efforts. Therefore we should work with, rather than work for, others. The latter situation produces an expectation of gratitude on the one hand and resentment at having to be obliged on the other.

He holds that agriculture students should participate in agricultural projects as part of their university training, and emphasizes that they should go into a village, not as social workers but as co-participants. Such experience should be required for graduation, not only in agriculture, but in all faculties. Students could be integrated into government projects, paid a modest salary and engage in the day-to-day work.

Such training would also be exceedingly beneficial in giving youth the "experience and self-confidence necessary for embarking upon a career of self-employment." The need to know how to be self-employed is necessary, SWAMINATHAN points out, because of the increasing dearth of jobs

for university graduates. By 1973, he estimates, over 4,600 postgraduates in agriculture will be surplus. Thus in trying to find ways students can employ themselves after graduation, SWAMINATHAN has announced that the IARI is no longer taking out patents on agricultural machinery designed by the Institute. On the contrary, it will supply the drawings to anyone wanting to start a small business by manufacturing them.

As an educator SWAMINATHAN also believes that there should be a restructuring of the educational system. Schools, especially in the villages, should become "learning situations," with an emphasis on Basic Education as propounded by John Dewey, Zakir Hussain and Gandhi, and the student should be educated to understand, work in, and if necessary be able to change, his environment and society.

Allied with his concern about education is his concern about the physical development of upcoming generations. Recent research, he points out, "has revealed a link between malnutrition and retarded physical and mental development." The first years of a child's life are crucial because the brain achieves 80 to 90 percent of its weight in the first four years. If the child doesn't get sufficient calories and protein during this growth period he will suffer, what SWAMINATHAN calls, "intellectual dwarfism." This is potentially a major problem for developing countries, with long-term implications: a country with a large portion of its population so afflicted would have difficulty competing in the world. A factor exacerbating the problem for India is rigidity of food habits. SWAMINATHAN therefore has been an advocate of diversification in food habits. He feels that a nutritional dimension should be added to land use planning and crop breeding.

SWAMINATHAN's international reputation rests not only on work done on major grain crops, but on other crops as well. He is credited with a scientific breakthrough in successfully crossing two *Solanum* species in the early 1950s. He repeated this success when he crossed two jute-yielding species, *Corchorus olitorius* and *c. capsularia*, in the next decade: it was "the dream of all those interested in jute improvement since the beginning of this century." He has also worked on cotton.

SWAMINATHAN, and those associated with him in radiation genetics at IARI, were pioneers in studying the indirect effects of radiation. Starting with plants, and then working with fruit flies, they found that frequency of spontaneous mutation is increased when either are fed irradiated food. These studies have been confirmed by other scientists and today genetic criteria are required in assessing the wholesomeness to man and animal of irradiated food.

SWAMINATHAN is a member of, and has been honored by, many learned societies. He is a Fellow of the Indian Academy of Sciences, the Indian National Science Academy and the Indian Society of Genetics and

Plant Breeding; an Honorary Member of the Swedish Seed Association, Svalof; a Member of the Technical Advisory Committee (TAC) to the Consultative Group on International Agricultural Research (CGIAR). He was Vice-President of the Ninth International Congress of Genetics in 1963 and the University Grants Commission of India chose him as the National Lecturer for 1971.

SWAMINATHAN was honored with the Shanti Swarup Bhatnagar Award for his contributions in the field of biological sciences in 1961. The Czechoslovak Academy of Sciences presented him with the Mendel Centenary Award in 1965, and in that same year he received the Birbal Sahni Award from the Indian Botanical Society and the *Indian Journal of Genetics* Medal. He was honored by the Government of India in 1967 with the Padma Shri Decoration and in 1970 he received an Honorary Doctorate from Sardar Patel University. The award he most appreciates, however, is a medal from the farmers of Delhi State in recognition of "his signal service to them for improving their agricultural practices."

SWAMINATHAN is one of the editors of *Radiation Botany* published by Pergamon Press, and is chief editor of the *Journal of the Post-Graduate School* of IARI. He has lectured abroad at international scientific conferences every year but one since 1957 when he first addressed the UNESCO Conference in Paris on "The Use of Radioisotopes in Scientific Research." He was a speaker at the Second U.N. Conference on the Peaceful Uses of Atomic Energy in Geneva in 1958. Over the years he has been invited to give a lecture or a series of lectures in Italy, Sweden, the Netherlands, Czechoslovakia, the USSR, Australia, the Philippines, Austria and the United States, and has given major addresses at IAEA conferences in 1960, 1963, 1964 and 1965. He gave a major address at the International Conference of Genetics in 1963 and again in 1968.

Despite his professional stature, SWAMINATHAN has an easy approachability and a becoming humility. *National Investment and Finance* which chose him as "Man of the Week" in February 1971, said of him: "He brings to bear on his work a missionary zeal which is infectious and a sense of dedication which is inspiring. It is said, knowledge is proud that it knows so much, wisdom is humble that it knows no more. Dr. SWAMINATHAN typifies that type of wisdom of the ancient without fanfare or trumpets. He radiates cheer, hope and self-confidence."

SWAMINATHAN himself pays tribute to the strength and support he derives from his wife. "She is a person with a unique combination of qualities. Her sense of values and her faith that the future of India depends upon the education and nutrition of children have provided much of the stimulus for my work. Her humanism and dislike of material values have strengthened my personal convictions and goals."

Mina Bhoothalingam, whom he married in 1955, comes from a dis-

tinguished Madrasi family. Her father is head of the National Council of Applied Economic Research and her mother is a well-known writer and lecturer on Hindu philosophy and architecture. Mrs. Swaminathan has a Master in Economics from Cambridge and worked as a Planning Officer in the Planning Commission before their marriage. She returned to the university to earn a Bachelor of Education and has since taught at St. Thomas' Girls Higher Secondary School in New Delhi and is presently running the Nehru Experimental Center, a preschool. She also writes and lectures on the use of drama as a medium of education. The SWAMINATHANS share an interest in music, both Indian and Western, and a pride in their three daughters, aged 8, 10 and 12.

SWAMINATHAN's personal and scientific optimism and enthusiasm, with which he infects all those with whom he comes in contact, is expressed in an article he wrote for *Indian Agricultural News Digest* (1969) where he said: "That plants love India is clear from our having more number of plant species than countries with a much larger land area, such as the United States and USSR. If we will reciprocate this love and attend to the needs of plants, crop plants will take us on the path of abundance of food, full employment, mental happiness and total freedom."

September 1971
Manila

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Biographical Sketch

Monkombu Sambasivan Swaminathan was born on 7th August, 1925 in the temple town of Kumbakonam in Tamil Nadu, in a well-known agricultural family of Kerala. His father, the late Dr. M.K. Sambasivan, a member of 'Kottathu Madom' of village Monkombu in the Kuttanad area of Kerala, chose Kumbakonam for his professional career after taking the M.B.B.S. degree in 1921 from the Madras Medical College. Kumbakonam, in addition to being famous for its temples, was also then widely known for filariasis and other health problems. Swaminathan's mother Shrimati Thangammal, belongs to an old family at Pudukottai, a former princely State now part of Tamil Nadu. Swaminathan had his schooling at the Native High School and Little Flower High School, Kumbakonam. His father died suddenly on October 12, 1936 at the young age of 36. However, even within the short span of 15 years of professional life Dr. Sambasivan not only became a leading surgeon of South India but also carved for himself a permanent place in the history of Kumbakonam as the one who wiped out the filarial 'Kumbakonam' mosquito within two years of his becoming the Chairman of the Municipal Council.

After Dr. Sambasivan's death, Swaminathan and brothers, Krishnamurthy (elder) and Ramdas (younger) and sister Lakshmi, were all brought up by Dr. Sambasivan's younger brother, M.K. Narayanaswami, whose loving care filled to a great extent the void created by the father's death. During 1940-44, when Swaminathan and his elder brother studied at the University College, Trivandrum, Dr. Sambasivan's elder brother, the late Shri M.K. Nilakanta Iyer, who was then Chief Secretary to the Government of Travancore, provided parental guidance. Similarly, Ramdas was looked after by his maternal uncle, Prof. K. Swaminathan, who was then Professor of English at the Presidency College, Madras (currently, he is Chief Editor of Mahatma Gandhi's collected works). Swaminathan cites this as one of the great blessings of the Hindu joint family system.

Impact of Early Upbringing

His early upbringing had an important impact on his later work and outlook. Inspired by Gandhiji, Swaminathan's father believed strongly that a *swadeshi* movement was essential for the country's economic well being. This in turn fostered an awareness in Swaminathan of the need for self-reliance and the pivotal role of community action. These associations also created a firm conviction in his mind of the need to share with others whatever one can spare. He also came into contact with the essentials of Indian philosophy which instilled in him a deep understanding of the need for unilateral love and of humility of spirit which leads to continuous seeking and enquiry and thereby to progress. His deep understanding of various concepts, such as the much-maligned concept of karma, provided the stimulus for work with detachment.

The Swaminathan Family

Despite his professional stature, Swaminathan has always remained easily approachable both in his home and in the office. Swaminathan typifies the humble wisdom of the ancients, bereft of fanfare. He radiates cheer, hope and self-confidence. No wonder one always finds young research scholars in his house.

Swaminathan, who attributes his success to the support he derives from his wife, Mina, says : "She is a person with a unique combination of qualities. Her sense of values and her conviction that the future of India depends upon the education and nutrition of children have provided much of the stimulus for my work. Her humanism and dislike of material values have strengthened my personal convictions and goals." They were married on 11th April, 1955.

Mina Swaminathan, who has a Master's degree in Economics from the University of Cambridge gave up a job in the Planning Commission to take to a teaching career in 1956. Her principal interest has been the development of techniques which are relevant to the special needs of deprived as well as gifted children. During the last 10 years, she has been working with Mobile Creches, an organisation which caters to the educational needs of the children of unskilled labour. She has

also been actively involved in promoting the pre-school education movement in the country.

The Swaminathans have three daughters. The eldest, Soumya, is currently completing the M.B.B.S. Course at the Armed Forces Medical College, Pune. A Science Talent Scholar, she intends to follow her work in Medical Genetics. The second daughter, Madhura, is doing M.A. in Economics, at the Delhi School of Economics. She is a mountaineer as well as a dancer in the Odissi style. The youngest girl, Nitya, has joined B.A. (Hons) in History in St. Stephen's College, and is deeply interested in archaeology, ancient Indian history and Sanskrit.

Swaminathan says that he is deeply indebted to his daughters for providing a window into the thought processes and aspirations of the post-independence generation. He has been fond of quoting the following poem by Rabindranath Tagore on children in several of his lectures :

*Child, how happy you are sitting in the dust,
Playing with a broken twig all the morning !
I smile at your play with that little bit of broken twig.
I am busy with my accounts, adding up figures by the hour.
Perhaps you glance at me and think, "What a stupid game
to spoil your morning with !"
Child, I have forgotten the art of being absorbed in sticks
and mudpies.
I seek out costly playthings, and gather lumps of gold and
silver.
With whatever you find, you create glad games.
I spend both my time and my strength over things I can
never obtain.
In my frail canoe I struggle to cross the sea of desire,
And forget that I too am playing a game.*

Academic and Professional Career

After taking the B.Sc. (Agriculture) degree from the Agricultural College at Coimbatore in 1947, Swaminathan joined the Indian Agricultural Research Institute, New Delhi. He completed the Associate IARI Diploma Course in Genetics

and Plant Breeding in 1949. In between, in 1948, he sat for the All-India Competitive Examination for recruitment to Central Services held by the Union Public Service Commission, since he was then advised by seniors that "agriculture does not offer much scope for a professional career." He was offered in 1949 a position in the Indian Police Service on the basis of this examination. Swaminathan, however, opted for continuing his research work and joined the Department of Genetics, Netherlands Agricultural University, Wageningen, in December 1949 as a UNESCO Fellow.

After a year at Wageningen, he joined the School of Agriculture at Cambridge in 1950. Both at Wageningen and Cambridge, Swaminathan worked on the cytogenetics of the tuber-bearing *Solanum* species, to which group the cultivated potato belongs. Attracted by the scientific papers he published during the period, he was offered by the University of Wisconsin, USA, a Research Associateship in Genetics. He worked for a year in this capacity at Madison and Sturgeon Bay and returned to India in January, 1954, after deciding not to take up a regular job offered there.

It was not easy to get a suitable job on return to India. He joined a temporary project in the *indica-japonica* rice hybridization programme at the Central Rice Research Institute, Cuttack, in April, 1954. He was offered the post of Assistant Cytogeneticist at the Indian Agricultural Research Institute in October, 1954. From October, 1954 to January, 1972, he worked at the Indian Agricultural Research Institute as Assistant Cytogeneticist, Cytogeneticist, Head of the Botany Division and Director. His contributions to the research and teaching programmes of IARI as well as to the building up of the experimental farm, laboratory, library, hostel and residential facilities and above all three major multi-disciplinary research centres, the Nuclear Research Laboratory, the Water Technology Centre and the Pulse Research Laboratory have led to the widespread acknowledgement of his role in the development of the IARI into one of the world's leading agricultural research and educational institutions.

In January, 1972, he succeeded his teacher, Dr. B.P. Pal, as the Director-General of the Indian Council of Agricultural Research. He continued in this position until March 31, 1979,

when he joined as Secretary to the Government of India in the Department of Agriculture and Rural Development. On April 3, 1980, he retired from Government service and joined the Planning Commission as Member for Agriculture and Rural Development. He served as Deputy Chairman of the Planning Commission between April and June, 1980.

Thus, from June, 1944 when he joined the Agricultural College at Coimbatore until today he has been working in the field of agriculture as a scientist, an educator as well as developmental administrator.

Research Contributions

A resume of major research contributions and the relevant references to papers published in scientific journals are given in the next chapter of this book. Only a few significant landmarks, particularly as seen by other distinguished scientists, are mentioned here.

(a) Research on Potato and Allied Solanum Species

During 1947 to 1955, Swaminathan carried out extensive researches on the genetics, cytogenetics and differentiation of both non-tuber bearing and tuber-bearing *Solanum* species. Swaminathan's research not only helped to unravel several problems relating to the origin of the potato, but also provided material for the development of commercial varieties such as 'Alaska Frostless.' His techniques and results have continued till today to be of great help to researchers in this field. On his return to India, he found it difficult to continue his research on potato, since potato plants do not normally flower (barring a few exceptions) in Delhi. Nevertheless, before shifting to other crops, he carried out a detailed study of the origin of the potato varieties cultivated in India from the 18th century.

(b) Induced Mutagenesis and Indirect Effects of Radiations

During 1955-1965, Dr. Swaminathan and his students carried out a wide range of studies in experimental mutagenesis, using wheat, barley and rice as test material. These studies helped to : (i) discover the mutagenic properties of vegetable oils, (ii) isolate mutants of breeding and phylogenetic

value in wheat, barley and rice and (iii) establish that radio-mimetic products are produced in irradiated culture media, leading to an enhancement in the spontaneous mutation frequency in *Drosophila melanogaster*. The last mentioned finding led to a re-thinking on the criteria to be used to determine the wholesomeness of irradiated food.

(c) *Raising the Ceiling to Yield in Major Crop Plants*

(1) *Wheat* : The history of the wheat improvement work carried out during 1960 to 1970 is best told through the passage from the book "Facing Starvation" by Lennard Bickel printed by the Reader's Digest Press in 1974, reproduced elsewhere in this volume. Its results are there for all to see in the food reserves.

In 1966 India faced the threat of widespread famine due to severe drought. Nearly 10 million tonnes of wheat had to be imported mainly from the United States under the Public Law 480 programme. Foreign observers felt that India was destined only for a "ship to mouth" existence. At that time the B.B.C. of London had sent a television team to India to review the impact of drought. Based on various interviews, the B.B.C. produced a film called, "Indian Eyes on the Future", sometime towards the end of 1966. The film records the hope of Dr. Swaminathan that "the wheat harvest of 1968 in India will mark the beginning of a new era in Indian agriculture." This hope, based at that time on calculations of expected area under high-yielding varieties, proved to be correct and the Government of India issued a special stamp in 1968 to mark the beginning of the "Wheat Revolution." This stamp carried a portrait of the Library of IARI as a symbolic acknowledgement of the role of agricultural science in enhancing wheat production.

Dr. Swaminathan has repeatedly emphasised that the credit for agricultural progress should primarily go to farmers who toil tirelessly in the sun and rain to feed others. He is firmly convinced that but for the national grid of cooperative experiments established by ICAR through the All India Co-ordinated projects, there would have been very little progress in applied research in the country. He has hence placed stress on *collective* rather than *individual* excellence. Hence, he got a

prestigious award instituted by the ICAR for giving recognition to whole teams of workers. At his instance, another prestigious award bearing the name of Jawaharlal Nehru was instituted by ICAR to accord recognition to the work of young Ph.D. scholars.

(2) *Rice* : The concepts of rice breeding developed during the 1960's included --

- (a) transferring the gene for dwarfing into a *basmati* background
- (b) developing widely adapted strains through sequential selection under diverse environments
- (c) collection and preservation of the germplasm occurring in N.E India and
- (d) development of hybrid rice, particularly for cultivation under rainfed conditions, in order to take advantage of heterosis for root growth and early maturity.

Subsequent events have shown the far-sightedness of these steps initiated in the early 1960's. The impact of the rice research work carried out by a small group of workers at the IARI shows the value of well-planned and concentrated research, in contrast to the diffused, "chasing academic butterflies" approach so commonly seen.

(d) *Contingency Planning, Risk Distribution Agronomy and Disaster Preparedness*

Looking ahead, and a scientific analysis of the possibilities for converting calamities into opportunities for mitigating the adverse impact of similar calamities in the future, have been two distinctive features of Dr. Swaminathan's work. Thus, in March, 1972, while delivering the Rajendra Prasad Memorial Lecture of the Indian Society of Agricultural Statistics, he dealt with the question "Can we face widespread drought again without food imports?" His answer was "yes", provided the country took to the path of building grain reserves, introducing mid-season corrections in cropping patterns, building seed reserves and promoting crop life-saving techniques and risk-distribution agronomy. The fact that the severe drought of 1979 could be faced without food imports is a testimony to the power of Indian agriculture.

In several lectures, the strategy for capitalising on favourable seasons and for minimising the adverse impact of aberrant weather has been outlined. The strategy for facing drought consists of :

- (i) The development and popularisation of crop life-saving techniques;
- (ii) contingency land use plans to suit different weather probabilities;
- (iii) compensatory production programmes in irrigated areas.

In his capacity as Secretary in the Department of Agriculture, he worked on a detailed strategy for disaster preparedness, even before the fate of the S.W. monsoon was known.

"Eternal vigilance is the price of good agriculture" is one of Swaminathan's firm beliefs. It is because of his capacity to anticipate problems and innovate approaches on a systems basis as well as to articulate ideas and information with clarity and precision, that Swaminathan has been most sought after in national and international scientific symposia as an invited speaker and has been described as a "Scientists' Scientist."

Recognition by Academies of Science and Professional Associations

Peer review is ultimately the best guide to the value of the work of a scientist. Dr. Swaminathan's work has been assessed by all the Scientific Academies in India as well as by the leading Science Academies in the U.K., U.S.A. and U.S.S.R. Since he is the only Indian scientist who has concurrently been honoured by the Royal Society of London, U.S. National Academy of Sciences and U.S.S.R. Academy of Agricultural Sciences, the scrolls sent by these Academies have been reproduced elsewhere in this book together with the scroll issued by the Indian National Science Academy (formerly known as the National Institute of Sciences of India).

The Czechoslovak Academy of Sciences awarded the Mendel Centenary Medal of the Academy to Dr. Swaminathan in 1965 on the occasion of the centenary of Mendel's discovery of the laws of heredity. The Swedish Seed Association, Svalof, elected him an Honorary Fellow of the Association in 1971.

XIV INTERNATIONAL CONGRESS OF GENETICS, MOSCOW, 1978



President and some Vice-Presidents

Left to Right : O.H. Frankel, R. Riley, N.V. Tsitsin (President) A. Gustafsson, Y. Tazima, A.R. Cordeiro and M.S. Swaminathan.

The Indian Science Congress Association elected him as General President of the 63rd session of the Science Congress held at Waltair in 1976. This session will go down in the history of the Science Congress Association as a significant evolutionary milestone, since Dr. Swaminathan introduced the concept of choosing a 'focal theme' for the Congress which will permit a detailed inter-disciplinary examination of a theme of supreme national relevance. The theme chosen for the Waltair Science Congress was "Science and Integrated Rural Development". The recommendations of this Congress led to the Government of India initiating in the same year an Integrated Rural Development Project. Dr. Swaminathan's address at the Waltair Science Congress is reproduced in this book.

The choice of Dr. Swaminathan for the Shanti Swarup Bhatnagar Award for Biological Sciences in 1961 by the Council of Scientific and Industrial Research, the Birbal Sahni Medal by the Indian Botanical Society in 1966, the Silver Jubilee Commemoration Medal by the Indian National Science Academy in 1973, Barclay Medal by the Asiatic Society in 1974, K.L. Moudgill Prize by the Indian Standards Institution in 1978 and Borlaug Award in 1979 indicate the wide spectrum of organisations which have expressed their appreciation.

Dr. Swaminathan has frequently stated that a well-knit scientific community and well-organised professional societies are essential for the healthy development of science. He has hence given time generously to the building up of scientific societies in India and abroad often serving as President, Secretary or a member of the Executive.

Education

Dr. Swaminathan's philosophy towards teaching has been that there is nothing called "teaching" and that there is only 'learning'. Both the 'teacher' and the 'taught' learn all the time. Only those who consider themselves students throughout life will have something useful to convey to others. Between 1954 and 1972, Dr. Swaminathan has taught several courses every year, without missing either a single class or a minute of any class. In addition, he has guided over 75 students in their thesis work for various degrees. In the first Zakir Hussain Memorial Lecture of the University Grants Commis-

sion delivered in 1970 as well as in a convocation address delivered at Kanpur, he dealt at length with his views on education. These lectures are hence reproduced in this volume along with a list of students who have done their thesis work for the Associate I.A.R.I., M.Sc. and Ph.D. degrees under his guidance.

He coined the term "techniracy" in 1972 to indicate the imparting of relevant technical skills by by-passing the regular literacy route. This concept was then converted into reality through the *Krishi Vigyan Kendras* organised by the Indian Council of Agricultural Research. During 1979, as Secretary in the Department of Agriculture and Cooperation of the Government of India, he initiated steps for organising *Van Vigyan Kendras* for providing grass-root level training in all aspects of social forestry.

According to Dr. Swaminathan, the letter he received from Jawaharlal Nehru in 1964 provided much of the stimulus for spending long hours in teaching young scholars. The letter is hence reproduced in this book.

Extension Methodologies

His firm conviction that green plants by virtue of their capacity to harvest solar energy provide the most powerful instrument for ending the irony of a rich country being inhabited by starving people (to quote Jawaharlal Nehru) led to Swaminathan becoming a leader of the technology transfer movement in agriculture.

His efforts in the field of technology transfer have led to

- (a) the initiation of the National Demonstration Programme for providing "windows into the world of higher productivity which awaits the farming community".
- (b) organisation of farmers into skilled seed producers,
- (c) whole village or watershed operational research projects designed to identify the constraints responsible for the gap between potential and actual farm yields ;
- (d) organisation of *Krishi Vigyan Kendras* for farmers and fishermen where learning is by doing and
- (e) a "Lab to Land" programme based on a systems approach to farming, with the entire farming family and farming system as units of the technology transfer effort.

In all the demonstration programmes, he has emphasised the need for selecting the poorest farmers in a village, since "demonstrations laid in rich farmers, fields will not have much extension value, as small farmers will attribute the yield obtained to the effects of affluence rather than of technology". He has also laid special stress on the development of technologies for increasing the income of landless labour families. For this purpose he initiated steps when he was in the ICAR for organising an All-India Coordinated Research programme for technologies for the landless poor.

It is his comprehension of a problem in its totality that has been of such significant help in the evolution of agricultural development strategies during the last two decades.

To fellow scientists, who hesitate to become actively associated in the "Lab to Land" programme, Swaminathan has often quoted the following statement of Albert Einstein :

"Concern for man himself and his fate must always form the chief interest of all technical endeavours in order that the creation of our minds shall be a blessing and not a curse".

Agricultural Research Administration : Conceptual and Operational Framework

Swaminathan holds firmly to the view that human resource development through emphasis on team work and collective excellence can alone help to solve the problems of poverty and unemployment in India. It is this conviction that only cooperative endeavour on symbiotic principles can lead to synergy that led to his elaboration of the pivotal role of synergy in agricultural development in the Sardar Patel Memorial Lectures of the All India Radio in 1973, parts of which are reproduced in this book.

Based on these guiding principles, the personnel policies of ICAR were restructured. The major aim was to make every staff member compete with his or her own past, rather with each other in a spirit of unhealthy rivalry. The prefaces written by Dr. Swaminathan in the ICAR Handbooks on the Agricultural Research Service and the Technical Services are reproduced in the following pages, because of their relevance

to achieving a synchrony between form and function. A National Academy of Agricultural Research Management was established at Hyderabad to provide relevant training and orientation to ARS personnel. Considerable importance is attached in the training programmes to getting to know well the clients of agricultural research, namely farmers and fishermen. The ARS system has evoked world-wide interest and received special mention in the New Delhi Declaration of the International Federation of Agricultural Research Systems for Development. The Declaration stated "The Agricultural Research Service of the Indian Council of Agricultural Research is a model which we would recommend for consideration and adaptation by all developing countries as soon as possible."

International Collaboration

Dr. Swaminathan has delivered numerous invited lectures at international scientific meetings. He was a Vice-President at the International Congresses of Genetics held at the Hague in 1963 and at Moscow in 1978. He is the Secretary-General of the XV International Congress of Genetics scheduled to be held in New Delhi in December, 1983. He was Vice-Chairman of the Technical Advisory Committee to the Consultative Group on International Agricultural Research during 1971 to 1976, during which period he played a key role in getting the International Board for Plant Genetic Resources organised. He was also Vice-Chairman of the Protein Calorie Advisory Group to the United Nations System during 1972 to 1976.

He has chaired several international conferences. At the U.N. World Food Congress held in Rome in 1974, he played a major role in getting a unanimous commitment for working towards the goal of ensuring by 1984 that "no one goes to bed hungry and no human being's physical or mental potential is stunted by malnutrition". Along with the late Senator Hubert Humphrey of the United States, he was invited by the Director General of F.A.O. to review the results of the World Food Congress for the benefit of the staff of F.A.O. Dr. Swaminathan chaired Commission II of the F.A.O. General Conference in November, 1979 at Rome. Dr. Edouard Saouma wrote

after the conference "Your brilliant chairing of Commission II of the conference earned the appreciation of the entire F.A.O. The fact that all these important and sensitive issues were dealt with so thoroughly and expeditiously, is certainly a tribute to your wisdom and decisiveness, as well as a reflection of the respect which you enjoyed from all delegations."

Dr. Swaminathan chaired the Committee of the Whole of the U.N. Conference on Desertification held at Nairobi in 1977. The Conference had to face several stormy issues including the role of biological warfare in desertification but the Committee of the Whole could arrive at unanimous recommendations on most of the issues where at the beginning of the conference there was a strong polarisation of views. Dr. Mostafa K. Tolba, Executive Director of the U.N. Environment Programme, later wrote: "As my colleagues and I again go through the reports and recommendations of the Conference on Desertification, I am even more aware of how much the Secretariat and the Conference itself are in debt for the way in which you, as Chairman of the Committee of the Whole, helped to guide our work."

Dr. Swaminathan is currently Chairman of the Board of Trustees of the International Council for Research in Agro-Forestry (ICRAF), and President of the International Bee Research Association and the International Federation of Agricultural Research Systems for Development. After an important session of the ICRAF Board, Dr. J.H. Hulse of Canada wrote: "I can think of no one who could have conducted the meeting with such sensitivity. I am sure we will all benefit immeasurably from observing the manner in which you brought the Board meeting to a conclusion from which every one felt optimism for ICRAF's future."

Dr. Swaminathan's contributions in promoting international scientific collaboration include efforts in the founding of (a) the International Genetics Federation, (b) Society for the Advancement of Breeding Researches in Asia and Oceania (SABRAO), (c) the International Crops Research Institute for the Semi-arid Tropics (ICRISAT) and (d) the International Federation of Agricultural Research Systems for Development (IFARD). SABRAO and IFARD represent the first significant efforts in promoting organised collaboration at the professional level

among agricultural scientists of developing countries.

Dr. Swaminathan has delivered key note addresses and concluding resumes at several international symposia. In May, 1980, he delivered the Nilsson Ehle Memorial lectures of the Mendelian Society of Sweden at Lund and Svalof. He also delivered a key-note address on "Fifty years of Agricultural Research and Development" at the Golden Jubilee Conference of the Commonwealth Agricultural Bureaux held in London on July 15, 1980.

While recognising the usefulness of international collaboration and institutions in promoting exchange of information and experimental material, Dr. Swaminathan has repeatedly underlined the essential need for a dynamic national research base for launching and sustaining an agricultural development programme that can work toward the triple goal of more food, more income and more jobs from available resources. "Without relevant location-specific research tailored to the needs of each agro-ecological, socio-economic, cultural and political milieu, sustained agricultural advance will not be possible." (M.S. Swaminathan in "Development and Transfer of Technology." Proceedings of the Inaugural Symposium, 1979, ICRISAT, pp. 179-182).

Three declarations, one issued by the Rome Forum on World Food Problems which met just prior to the World Food Congress in 1974 under the chairmanship of Barbara Ward, and two others issued by the International Federation of Agricultural Research Systems for Development are reproduced here because of their significance to agricultural research and development. Dr. Swaminathan served on the drafting committees which prepared these declarations.

Economic Ecology and Our Agricultural Future

In several scientific papers, lectures and reports, the need for launching an economic ecology movement so as to harmonise the short and long term goals of development has been stressed by Swaminathan.

He pointed out in his Presidential address to the Agriculture Section of the Indian Science Congress in 1967, "*Therefore, the initiation of exploitative agriculture without a proper understanding of the various consequences of every one of the*

changes introduced into a traditional agriculture and without first building up a proper scientific and training base to sustain it, may lead us into an era of agricultural disaster in the long run, rather than to an era of agricultural prosperity."

The basic building blocks of an action programme based on considerations of ecology and economics were dealt with in detail by Dr. Swaminathan in the Sardar Patel lectures of the All India Radio in 1973 and particularly in the 1973 Coromandel lecture entitled, "Agriculture on Spaceship Earth", where he said :

"The poorer nations, however, are faced with the desire and need to produce more food from hungry soils, more clothing and more housing. They are aware that historically a rising standard of living has depended on the ability of agriculture to release manpower to other more industrial pursuits. They hence naturally wish to develop more industries and to find productive and remunerative employment for their growing population. For them, conditions of poverty and inadequate arrangements for human and other waste disposal may be greater causes of water and air pollution than the effluents from factories or fertilizer from the fields. Since the causes of pollution are by and large different, the solutions will have to be different too and it would be a grave mistake to attempt to copy the policies now being propagated in the developed world.

"We are fortunately in a position to build a positive policy of economic ecology based on a series of DOs rather than DON'Ts."

It is this deep concern for a positive policy of economic ecology, that led to the promotion of projects like a cadre of soil health care workers in villages and a rural resource corps consisting of professionally qualified young persons. The International Union for Conservation of Nature and National Resources in its Bulletin of April, 1980 (New Series Vol. II No. 4) pointed out how, after posing the question "Have we the right to deny to future generations the fruits of millions of years of natural evolution?" with regard to the use of a part of the Silent Valley Reserve Forest in Kerala for a hydel-power project, Dr. Swaminathan offered a concrete set of proposals for providing adequate power, employment and water for irrigation to the people of the area where this project would have come up.

Servant of Agriculture

The Borlaug Award citation (presented on 4th September, 1979) sums up beautifully his contributions as well as the philosophy underlying them and hence it will be apt to conclude this narration by reproducing it.

*“Monkombu Sambasivan Swaminathan (b. 7 August 1925)
Servant of Agriculture*

in profound appreciation of his catalytic role in providing deep insights and inspiring fellow scientists to set goals, share experience in the process of social change and transformation to a society which treats of Man at the centre.

For evolving a strategy for agriculture rooted in science, but tempered by concern for ecology and human values.

For the amplitude of his perceptions which has encouraged community effort directed to a synthesis in the movement of agriculture”.

INSIGHT...INSIGHT...INSIGHT

Tribute to a hero of the green revolution

Report by
Normita Thongtham

ON the occasion of his receiving the Nobel Peace Prize in 1970, Dr N.E. Borlaug wrote: "The green revolution has been a team effort and much of the credit for its spectacular development must go to Indian officials, organisations, scientists and farmers. However, to you, Dr Swaminathan, a great deal of the credit must go for first recognising the potential value of the Mexican dwarfs (wheat strains). Had this not occurred, it is quite possible that there would not have been a green revolution in Asia."

Wheat and rice-growing countries around the world are indeed heavily indebted to Indian cytogeneticist Dr Monkombu Sambasivan Swaminathan, who has devoted more than 30 years of his professional career to increasing the yield of existing crops. He was the one who introduced the dwarf wheat varieties, which were the foundation of the "green revolution" that produced spectacular increases in India's wheat production.

Last Friday, April 19, at its 43rd graduation ceremony, the Asian Institute of Technology paid its own tribute to Dr Swaminathan when it awarded him an honorary degree, making him a Doctor of Technology. He was also the guest speaker at the ceremony.

Receiving honorary degrees, awards and honours has become routine for Dr Swaminathan, now the director general of the International Rice Research Institute in the Philippines. The honorary doctorate from AIT was the 21st he has received from various universities in India, West Germany, the United States, the Philippines and now Thailand. The recipient of the Ramon Magsaysay Award for Community Leadership in 1971, Dr Swaminathan is flying to Washington this week to receive an award from the Association for Women in Development, for his outstanding contributions to activities which foster development for women. He will be the first ever to receive the award.

Despite all the international awards he has received, the IRRI job is the first and only assignment

the Indian researcher has taken outside his country. "My whole research career was in India, from 1947 to 1982," he said. "India went through a very interesting phase from a begging bowl to a bread basket, and I was happy to be associated with that very important transformation."

But he won't take all the credit for India's green revolution. "That transformation in the 1960s and the 1970s was made possible by the commitment of the political leadership," he said, "especially the late prime minister Indira Gandhi, who gave tremendous support to science and technology, particularly agriculture science."

Any project needs three important ingredients for success, said Dr Swaminathan. One is political will, "for it is the political leadership or the government who provide the overall guidance and overall support, and decide on priorities and allocations."

Next is professional skill — a vast army of professionals who are conversant with modern science and technology, and who are committed to the cause of using science and technology for national development.

"But even though you have political will and professional skill, still nothing will happen without people's cooperation and participation, in this case farmers' participation," Dr Swaminathan said.

He joined IRRI in 1983 because, he said, "I am a scientist and at IRRI I will have the facilities to continue my research work in plant genetics. Secondly, rice is an important crop for the whole region, not only India. I feel that in the future it is the rice economy of South and Southeast Asia which will determine largely the future of agricultural economy, because rice can grow under a wide range of conditions."

Rice improvement holds the key to ensuring food security in South and Southeast Asia, Dr Swaminathan believes. Hence IRRI, which has been responsible for the development of short-straw rice varieties that have doubled and even tripled rice production, is forever doing research to improve existing



Above: just the latest in a long line of awards and honorary degrees.

strains. While Dr Swaminathan was in Bangkok, news 10 days ago from the Philippines said IRRI had developed a new strain of rice that can yield up to 24 per cent more grain than the common varieties. The new strain, called IR-64, yields up to 7,000 kilogrammes per hectare more than the IRRI-developed IR-36 and IR-42 commonly grown throughout Asia, the news report said.

Productivity

"What is called the green revolution technology has largely been based upon improving the yield or productivity per hectare of irrigated rice," Dr Swaminathan said. "That kind of area provides more than 75 per cent of the world's rice today but it constantly faces threats like pests, diseases and soil problems," and IRRI has to be always vigilant to defend, maintain and improve the gains already made.

IRRI has also made experiments to extend the benefits of new technology to less favourable environments, like the deep-water areas of southern Thailand and the drought-prone areas of northeastern Thailand. It has developed floating rices for the deep-water areas, and rain-fed rices for areas prone to drought.

INSIGHT...INSIGHT...INSIGHT

Dr Swaminathan believes that for the rest of the century, the famine of jobs and job opportunities will be far more serious than the famine of food in South and Southeast Asia. "With the population still going up, a lot of rural people are unemployed or underemployed. Many women have no jobs, yet unless the woman's income is also added, the family income will be very low.

"Agriculture will not go wrong if farmers are helped, and farmers include the whole farming family. Women play a key role both as decision makers as well as farm workers and farm managers but developing countries' extension service in the past did not fully realise the importance of also taking the latest skills and knowledge to women."

To help rice-farming families, IRRI has initiated a project with support from the Asian Development Bank. Called Prosperity Through Rice, it has three components: showing the farmers how to produce rice at minimum cost; improving their income through mixing farming and crop, livestock and fish production; and producing bio-gas from plant waste materials.

Dr Swaminathan praised the AIT for its excellent remote sensing centre, as well as natural resource and water resource engineering that are the bases of agriculture. "But the greatest contribution from institutions like AIT is the production of manpower — the human resource development. Only trained people have a multiplier effect so you can never measure what the impact of this kind of contribution is." IRRI itself plays an important role in education and training; so far it has trained 3,500 students from 80 rice-growing countries including Thailand.

Although the scientist and his colleagues at IRRI are forever on the look-out for pests and diseases, Dr Swaminathan does not advocate the use of pesticides. "Our approach is based on integrated pest management. IRRI is famous for its pest-resistant varieties. We make crosses to find rices which have a very high degree of resistance to most pests and diseases, or what you call genetic resistance, so that the farmers do not have to buy any pesticide."

IRRI has 75,000 varieties of rice in its collection, called the rice gene bank, from where the rice scientists draw their materials for cross breeding. Many of the genes are of wild rice strains which occur in forest areas and other places

which are continually being destroyed and therefore in danger of vanishing forever.

Other important forms of pest control are through biological control and cultural practices, said Dr Swaminathan. "In nature, most pests have their own enemies so if you spray indiscriminately, you kill the natural enemies. The important thing is not to spray insecticides unnecessarily but to promote the growth of the pests' natural enemies.

"And plant rice in rotation with other crops, particularly a leguminous crop which can fix nitrogen from the air, to break the pest multiplication cycle."

But farmers do need fertiliser to produce a good yield, said the rice expert. One ton of rice requires about 20 kilogrammes of nitrogen, he said, so if you want to produce five tons of rice, your crop has to be given 100 kilos of nitrogen.

"Usually the soils of Thailand and most of Southeast Asia have enough nutrition to support one ton of rice. Then we may be able to add other nutrients to produce two tons through organic matters. But if you want to yield five or six or seven tons, then you have to use some inorganic fertiliser."

Dr Swaminathan does not altogether rule out the need to import insecticides and fertilisers, but in general the policy must be integrated pest management and integrated nutrient supply, he said. And we should not neglect our own local resources such as manures, natural nitrogen from the air, crop rotations and growing of leguminous crops, in addition to the pest management which he mentioned earlier. All these should form part of any government's integrated strategy in production planning, he stressed.

Dr Swaminathan is not only interested in breeding rice, wheat and other economic crops. Late last year he was named president of the International Union for the Conservation of Nature and Natural Resources, and vice president of the World Wildlife Fund, thus putting him in the same league as Prince Philip of Britain and Prince Bernhard of the Netherlands. Prince Philip is president of World Wildlife Fund and vice president of IUCN, posts earlier held by Prince Bernhard.

Swaminathan. "Ecology means remaining in harmony with nature, and agriculture means using natural resources in a sound and scientific way. Therefore, anybody who's interested in agriculture, not only for today but for the future, has to think of the conservation of nature and natural resources. My main job is with IRRI, but I know the importance of conservation and it is my duty to share that knowledge."

The son of a famous surgeon, Dr Swaminathan was born in Tamil Nadu, India, on August 7, 1925. He said he was interested in agriculture because "it is the very basis of our economy in India and in many of the developing countries. Most of the people depend upon agriculture, not only for food but also for income and employment. The rural masses are mostly illiterate so I've always felt that we must get the best of science and technology for rural transformation."

He went to agricultural institutes in India before obtaining his PhD from the University of Cambridge, UK, in 1952. He also received fellowships in Genetics at the Agriculture University at Wageningen, the Netherlands, and at the University of Wisconsin in the US.

But he is not the only one in his family who is dedicated to helping the poor. His wife, Mina, is a teacher of economically handicapped children, teaching vocational skills to construction worker children. Of their three daughters, the eldest, Soumya, is working on her post-graduate degree in paediatrics to better serve child patients; Madhura, who has a degree in economics, works in villages in South India on the role of credit to landless families; and Nitya, the youngest, works with an organisation which helps very poor and destitute women in Hamdabad, Gujarat state of India, by teaching them vocational skills.

"Helping fellow human beings is our mission in life, because it brings the greatest satisfaction, mentally and spiritually. It would be short-sighted to think that we can be happy while millions of people are impoverished and unhappy," said Dr Swaminathan, who, many would agree, is himself a rare breed of the human species.

Applied Ecology

"Agriculture is what you call applied ecology," explained Dr

OUTLOOK PEOPLE

Swaminathan: A rare breed of man

Noted Indian scientist Monkombu Sambasivan Swaminathan, the Father of the Green Revolution and recipient of a long list of honorary degrees and scientific awards, has received a prize yet again for his efforts in increasing the world food supply. But he is unique for another reason, writes Normita Thongtham.

THE world population is approaching five billion but among them it will be difficult to find another Monkombu Sambasivan Swaminathan. As director general of the Philippine-based International Rice Research Institute he is a banker of a different kind: he collects rice genes, of which Thailand has contributed 4,000 varieties. But that is not the reason why he is a rare breed of man.

The Indian cytogeneticist was recently named the recipient of the General Foods World Food Prize, a newly created international award to recognize, encourage and reward outstanding individual achievement in improving and increasing the world food supply. He will receive the coveted prize on October 6 at the Smithsonian Institution in Washington, D.C., it was simultaneously announced in Manila and New York recently by General Foods Corporation and General Food Funds, Inc, sponsor of the award.

Although he is the first to receive the award, the prize is not unique. In fact, receiving awards has become routine for this superachiever, who has been showered with no less than 21 honorary doctorate de-



grees by various universities in India, West Germany, the United States, the Philippines and the Thailand-based Asian Institute of Technology.

He has received an equally long list of scientific awards, including the highly esteemed Albert Einstein World Science Award; the Shanti Swarup Bhatnagar Award of India for his contributions to Biological Sciences; the Mendel Memorial Award of the Czechoslovak Academy of Sciences for his contributions to Plant Genetics; the Birbal Sahni Medal of the Indian Botanical Society for his contributions to Applied Botany; and the Barclay Medal of the Asiatic Society for contributions to Genetics, to name just a few. In 1971 he received the Ramon Mag-saysay Award for Community

Dr Swaminathan in 1985, when he received the Doctor of Technology honorary degree from the Asian Institute of Technology. It was the 21st honorary doctorate he has received from various universities.

Leadership in recognition of his "contributions as scientist, educator of both students and farmers, and administrator towards generating a new confidence in India's agricultural capabilities."

Even Nobel Prize winners paid tribute to him. Agricultural scientist Dr Norman E. Borlaug said it best when he received the Nobel Peace Prize in 1970: "The Green Revolution has been a team effort and

much of the credit for its spectacular development must go to Indian officials, organisations, scientists and farmers. However, to you, Dr Swaminathan, a great deal of the credit must go for first recognising the potential value of the Mexican dwarfs (wheat strains). Had this not occurred, there would not have been a Green Revolution in Asia."

Despite these honours, Dr Swaminathan has always tried to play down his role as an architect of the Green Revolution that swept from Afghanistan to China and throughout Asia — and turned his native India from a begging bowl to a bread basket — in the 1960s and 1970s. And this very humility is what separates him from ordinary men.

Instead of enumerating his own achievements when he was named recipient of the General Foods World Food Prize, he paid tribute to the small farmers of the world, saying, "I would have liked to see the prize go to a farmer, for it is the farmer who toils in the sun and the rain so that the rest of us can exist."

He seemed to have forgotten that without him, the world's farmers would still be struggling with less productive and disease-prone wheat and rice varieties.

When he came to Thailand in 1985 to receive the Doctor of Technology honorary award from AIT, Dr Swaminathan told this writer of his self-appointed mission to help fellow human beings, "because it brings the greatest satisfaction, mentally and spiritually. It would be short-sighted to think that we can be happy while millions of people are impoverished and unhappy." The sincerity in those soft-spoken words was most convincing, but his achievements speak even more eloquently.

Born in Tamil Nadu, India, on August 7, 1925, Dr Swaminathan could have easily followed in his father's footsteps and become a famous surgeon. Instead, he chose to become an agriculturist because "it is the very basis of our economy in India and in many of the developing countries. Most of the people depend upon agriculture, not only for food but also for income and employment."

He went to agricultural institutes in India before obtaining his Ph.D. from Cam-

bridge University in England in 1952. He also received fellowships in genetics at the Agricultural University at Wageningen in the Netherlands, and at the University of Wisconsin in the United States.

For 35 years, from 1947 to 1982, he devoted his life to improving the yield of existing crops ("in collaboration with my colleagues and students," he is quick to say) such as rice, wheat and potato, and disseminating the knowledge to illiterate farmers in a language they could understand.

He has been active in the collection and conservation of plant genetic resources, particularly of rice and wheat, and his discovery of certain genes and the technique of their manipulation triggered the Green Revolution that has increased the yield and improved the lot of farmers.

Despite the international impact of his work, the noted scientist spent the whole of his research career in his native country, where he served in various capacities including that of a teacher, researcher, research administrator and secretary to the government of India. In 1983 he finally accepted an offer to head the International Rice Research Institute in Los Banyos, a university town 65 kilometres southeast of Manila, "because I am a scientist and at IRRI I will have the facilities to continue my research work in plant genetics. Secondly, rice is an important crop for the whole region, not only India. I feel that in the future it is the rice economy of South and Southeast Asia which will largely determine the future of agricultural economy, because rice can grow under a wide range of conditions."

IRRI spearheads the Herculean task of collecting and assembling under one roof samples of all the rice types in the rice-producing world. So far, the gene bank has assembled almost 80,000 types of domesticated and wild rices from all parts of the world, the top contributors being India with 15,000 varieties; Indonesia, 7,800; Bangladesh, 5,300; China, 5,000; and Thailand, 4,000.

IRRI protects the rice seeds from extinction and promotes their use to benefit small subsistence farmers. Each newly-collected rice strain is tested to determine its agronomic

potential and pest resistance, and varieties with desirable genetic traits are used as parents in IRRI's Genetic Evaluation and Utilisation programme of breeding and testing.

Rice improvement holds the key to ensuring food security in South and Southeast Asia, Dr Swaminathan believes. Hence IRRI is continuously doing research to improve existing strains and forever finding ways to increase yields. The strains it has developed are grown throughout the rice-producing countries in South and Southeast Asia.

The man at the helm of IRRI is not only interested in breeding rice, wheat and other economic crops. In late 1984 he was made the president of the International Union for the Conservation of Nature and Natural Resources and vice president of World Wildlife Fund, thus putting him in the same league as Prince Bernhard of the Netherlands, who used to hold both positions, and Prince Philip of England. Prince Philip is president of World Wildlife Fund and vice president of IUCN.

"Agriculture is what you call applied ecology," he patiently explained to this writer, to whom he has kept close contact by regularly sending news of his and IRRI's activities over the years. "Ecology means remaining in harmony with nature, and agriculture means using natural resources in a sound and scientific way. Therefore, anybody who's interested in agriculture, not only today but for the future, has to think of the conservation of nature and natural resources. My main job is with IRRI, but I know the importance of conservation and it is my duty to share that knowledge."

A teacher, researcher, scientist, administrator and the father of the Green Revolution. Dr Monkombu Sambasivan Swaminathan is all that, and more. For, with the exception of the King of Thailand, how many people of his status can you find who derive personal satisfaction, not from accumulating material wealth, but from improving the lot of people in the grassroots level? Not many, and for that reason, Dr Swaminathan is a rare breed indeed.



BORLAUG AWARDS

MONKOMBU SAMBASIVAN SWAMINATHAN b. 7 August 1925

servant of agriculture

in profound appreciation of his catalytic role in providing deep insights and inspiring fellow scientists to set goals, share experience in the process of social change and transformation to a society which treats of Man at the centre.

for evolving a strategy for agriculture rooted in science, but tempered by concern for ecology and human values.

for the amplitude of his perceptions which has encouraged community effort directed to a synthesis in the movement of agriculture.

COROMANDEL FERTILISERS LIMITED

4 September 1979

UNIVERSITY OF WISCONSIN-MADISON

The Board of Regents of The University of Wisconsin System,
on the nomination of the faculty, has conferred upon

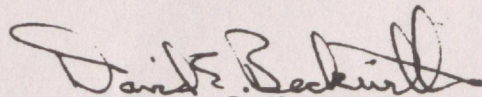
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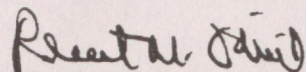
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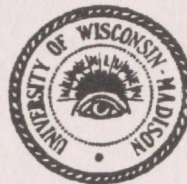
DOCTOR OF SCIENCE

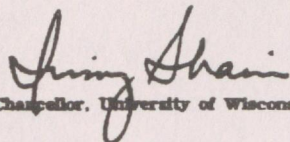
Together with all honors, rights, and privileges belonging to that degree.

In witness whereof, this diploma is granted. Given at Madison
in The State of Wisconsin, this twenty-second day of May
in the year nineteen hundred eighty-three, and of
The University the one hundred thirty-third.


President of the Board


President, University of Wisconsin System




Chancellor, University of Wisconsin-Madison

C I T A T I O N

MONKOMBU SAMBASIVAN SWAMINATHAN

For over a quarter of a century, M. S. Swaminathan has been a major force in shaping the Indian government's policies in agriculture and environmental affairs. Equipped with post-doctoral work at the University of Wisconsin, he has dedicated his career to preventing famine and ameliorating hunger in his homeland and throughout the world. As a geneticist, he worked for the development of strains of wheat, rice and coarse grains that would flourish in the ecological settings of India. As a public servant, he has had the responsibilities of leadership in the Indian Council of Agricultural Research, the Departments of Agriculture and Rural Development of the Indian government, the Science Advisory Committee to the Indian Cabinet, and the International Rice Research Institute in the Philippines. He has served as President of no less than nine Indian professional societies, including the Indian National Academy of Science.

As a result of his having put science at the service of his people, India, which seemed doomed to mass starvation by this period of its history, now feeds itself by its own efforts. Dr. Swaminathan has been at the center of one of the notable human achievements of our generation.

C O N F E R R A L

MONKOMBU SAMBASIVAN SWAMINATHAN: For your brilliant work in science, which has helped to sustain a great nation, the University of Wisconsin confers on you its honorary degree, Doctor of Science.



UNIVERSITY OF WISCONSIN
Madison
1981

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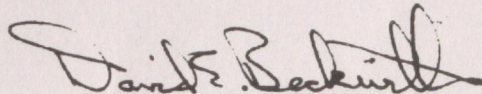
MONKOMBU SAMBASIVAN SWAMINATHAN

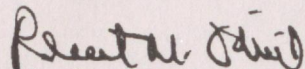
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DOCTOR OF SCIENCE

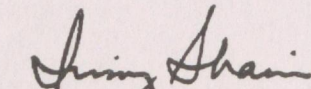
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UNIVERSITY OF WISCONSIN
Madison
1981

The Board of Trustees of the
Asian Institute of Technology

Has Conferred Upon

Monkombu Sambasivan Swaminathan

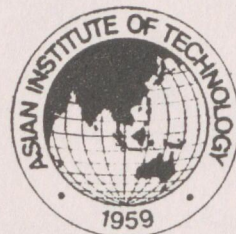
The Honorary Degree of

Doctor of Technology

Given this Nineteenth day of April 1985

Sanjay M. Verma

President of the Institute



Th. Khoman

Chairman of the Board

**CITATION ON THE OCCASION OF THE CONFERMENT OF THE HONORARY DEGREE
OF DOCTOR OF TECHNOLOGY ON MONKOMBU SAMBASIVAN SWAMINATHAN AT THE FORTY-THIRD GRADUATION CEREMONY
OF THE ASIAN INSTITUTE OF TECHNOLOGY**

Mr. President, I am honoured to present Dr. Monkombu Sambasivan Swaminathan, Director-General of the International Rice Research Institute, for the conferment of the honorary degree of Doctor of Technology. The Board of Trustees has approved the award in recognition of Dr. Swaminathan's outstanding contributions to the academic and technological development of this region of the world. Indeed, Mr. President, his achievements have been so numerous that I cannot possibly mention all of them in the short space of time allowed to me in this address and I beg his forgiveness for these necessary omissions.

The Asian Institute of Technology exists to find solutions to the technological needs of Asia. There is probably no more important need than the requirement to attain and, in some cases, maintain food self-sufficiency for this region. If present population growth rates continue there will be twice as many Asians alive in 25 years time as there are today. The problems of feeding this vast population will be enormous, particularly since most of the land which is good arable land has, with few exceptions, already been put to the plough. The only possible solutions to this problem lie in the intensification of agricultural production. Either more crops per year must be grown or the yield of existing crops must be increased. It is in this second area that Dr. Swaminathan has made such outstanding contributions. He has, in fact, devoted the whole of his professional career to improving the yield of the staple food grains of this region, and he has been tremendously successful in this endeavour.

He started out in his career as a Cytogeneticist at the Indian Agricultural Research Institute and from 1961 to 1966 was Head of the Botany Division at this Institute. During this period he was made an honorary member of the Swedish Seed Association, was given the Shanti Swarup Bhatnagar award for contributions to biological science and the Mendel Centenary Award from the Czechoslovak Academy of Science.

His talent was soon recognised and in 1966 he became Director of the Indian Agri-

cultural Research Institute, a post he held until 1972. At this time Dr. Norman Borlaug and his team from the International Maize and Wheat Improvement Centre in Mexico (or CIMMYT in short) were making available the dwarf wheat varieties which were the foundation of the "green revolution". Dr. Swaminathan introduced these varieties into India. The results were quite spectacular.

In the decade 1960-1970 wheat production in India more than doubled and in 1978 the country achieved self-sufficiency in food grains. In honour of his achievements during this period he was made a Fellow of the Royal Society of London, of the U.S. National Academy of Sciences, of the Swedish Seed Association, the Indian Academy of Sciences and was made a foreign member of the Lenin Academy of Agricultural Sciences.

From 1972 to 1980 he was Director-General of the Indian Council of Agricultural Research and from 1980 to 1982 was a member of the Planning Commission of India.

He then turned his attention to the major food grain of this region - rice. In 1982 he became Director-General of the International Rice Research Institute in the Philippines (or IRRI as it is known in short) a post which he still holds. IRRI has made possible the revolution in rice yields that CIMMYT made possible for wheat, developing short-straw varieties that are very responsive to fertiliser input and which make it possible to double or even triple yields compared to the traditional varieties. This is work of enormous value for this region.

Mr. President, I have the honour and pleasure, on behalf of the Board of Trustees and the Institute to present Dr. Monkombu Sambasivan Swaminathan for the conferment of the Honorary Degree of Doctor of Technology.

19 April 1985



PRIME MINISTER

New Delhi
March 30, 1982

Dear Dr. Swaminathan,

As you prepare to leave for Manila, I should like to express my appreciation of your work in India and also to tell you how much we shall miss you. You have made significant contribution to our scientific and economic policy making. Your role in the strengthening of our agricultural base is not inconsiderable. To your tasks in the Planning Commission you brought deep concern for the nation's realities besides the intellectual discipline of a scientist.

My good wishes to you in the new assignment you have taken up.

Yours sincerely,

Indira Gandhi
(Indira Gandhi)

Dr. M.S. Swaminathan
Member
Planning Commission
New Delhi

AWID Honors Swaminathan

Dr. M. S. Swaminathan, Director General of IRRI, received the Association for Women in Development Award for "outstanding contributions to the integration of women in development" at the Association's April meeting in Washington. In accepting the award for Dr. Swaminathan, Dr. C. Jean Weidemann of the Midwest Research Institute quoted from Swaminathan's address to the Bellagio meeting, part of which is excerpted below.

"It is essential that IARCs avoid a *laissez faire* approach (to women's issues) and move *positively and aggressively* in the direction of assisting women dependent upon agriculture for their well-being. This is particularly important in the context of the increasing emphasis placed by IARCs on attending to the problems of ecologically handicapped farming areas and economically disadvantaged farm families. *It is precisely in such situations that the value of women's labor and income to household happiness and survival is immense.*

How can IARCs help in generating greater opportunities for flexible and productive employment when most of them are not concerned with post-harvest technology and the off-farm employment sector?

An effective way of responding to this challenge is to capitalize upon IARCs single most important asset, namely access to diverse scientific institutions and political systems. By the very nature of their functioning—through networks, cooperative programs, monitoring tours, symposia and conferences, and training activities—IARCs exert an influence on national research systems which far exceeds their budget or scientific capability and infrastructure. They have equal access to the knowledge and material pool in developed countries. They can hence lead a *positive movement* of helping women, particularly (those) belonging to small farmer and landless agricultural labor families, through the organization of workshops which can help to compile a portfolio of research and training tasks for each major farming system and getting interested laboratories and scientists, both in developed and developing countries, to adopt specific tasks. In addition, they can set an example in involving women scientists to a greater extent in all aspects of technology development and dissemination.

While action on the above lines is feasible and should be taken, *it is important to recognize that science is not a magic wand with which sex inequalities in workload and economic returns can be made to vanish.* This should be emphasized clearly as otherwise false hopes will be aroused about the capacity of science and technology to remove deep-seated social maladies.

In the ultimate analysis, it is only the concern, commitment and concerted action of national agricultural research systems and policymakers that can lead to meaningful results in imparting a users' perspective in research priorities and strategies. The major role of IARCs should be to trigger a self-propelling and self-replicating pattern of involvement of NARS in R&D efforts designed to give equal attention to the needs of men and women farmers and agricultural labor. *Prospects of external funding should not be the main motivating factor for the participation of NARS in networks or studies in this field.* There are numerous examples to show that involvement without conviction and commitment leads to the collapse of bilateral or multilateral donor-aided programs when the external input is withdrawn. Enduring benefits will result only when a proper blend of political will, professional skill, and people's participation is achieved within each country."

R E S P O N S E

of Moncompu Sambasiva Swaminathan, 1971 Ramon Magsaysay Awardee for Community Leadership, during the Presentation Ceremonies of the 1971 Ramon Magsaysay Awards held at the Coral Ballroom, Manila Hilton, on August 31, 1971 at 5.30 in the afternoon.

Mr. Vice-President, Mr. Chief Justice,
Mrs. Magsay, Excellencies, Mr. Chairman
and Members of the Foundation's Board of
Trustees, Fellow Awardees, Distinguished
Guests, Ladies and Gentlemen:

I deem it a very great honour and privilege to have been chosen for the Community Leadership award instituted in the memory of one of the greatest world leaders and humanists of our time. The late President Ramon Magsaysay devoted his tremendous vision, wisdom and energy to the cause of helping his fellowmen to build a better life for all. A satisfied stomach is a pre-requisite not only for happiness but even to enable men to behave as human beings, a fact so well expressed by the Roman philosopher Seneca, when he said, "A hungry people listens not to reason nor cares for justice, nor is bent by any prayers". Even as recently as the mid-sixties, the future of many of the developing nations appeared hopeless when assessed in terms of their ability to feed their fast growing populations. Drs. William and Paul Paddock in their book "Famine - 1975" even went to the extent of comparing the fate of my countrymen after 1975 to that of sheep being led to the slaughter house. Then came the avalanche of scientific results from this great country, Mexico, Taiwan and India which opened up altogether new vistas in the yield potential of our major food crops. I consider this award as a tribute which the Magsaysay Foundation would like to pay to the entire Community of Agricultural Scientists in my country, who have helped to provide a breathing spell during which efforts can be made to prove the prophets of doom false.

New concepts of crop planning and land use pattern designed to get the maximum benefit from the physical, biological and environmental endowments of tropical and sub-tropical agriculture are being developed. Where there is water, four or even five crops can now be grown in a year in multiple, mixed and relay cropping systems, getting for the farmer the benefit of nearly 450 days of crop growth in a year of 365 days. New methods of water management and enrichment of soil fertility coupled with crop varieties capable of avoiding the rigours of drought or floods through changes in their length of life and coordinated pest control schedules are opening up new hopes for peasants working in environmentally handicapped areas. The "green revolution" in cereals has paved the way for developing harmonious systems of agriculture and animal husbandry.

The scientific prospects for alleviating hunger, increasing the avenues for productive and remunerative employment and banishing poverty through a radical transformation of cropping systems leading to the growth of agro-industries, are fascinating and immense. At the same time the magnitude of the problems of illiteracy, under- and mal-nutrition, under- and un-employment and population growth are truly staggering. In spite of all efforts, the number of illiterates in absolute terms is growing in many parts of Asia including India. Leading scientific journals carry data indicating that protein calorie mal-nutrition in infants may affect the replication of the chemical substance of heredity, DNA, and lead to an irreversible under-development of a child's intellectual potential, thus compounding the ill effects of the already poor educational opportunities.

The Indian achievement in wheat production leading to a near doubling of the total harvest from a little over 12 million tonnes of over 23 million tonnes in 4 crop seasons has few parallels in recorded agricultural history and serves to illustrate what can be accomplished, provided farmers, scientists, extension and communication experts and political and administrative leaders, all function like members of a symphony orchestra. Unless such an orchestration in effort is generated in all crops, a scientific break through may not necessarily lead to a production break through. This is illustrated by the yield stagnation in Sorghum in my country where although new hybrids and varieties capable of yielding 2 to 3 times more than the earlier ones have been available since 1964, the yield per hectare has hardly altered in the last decade. Wheat posed fewer pest, management and marketing problems and the farmers responded with enthusiasm to produce as much or even more than what was harvested in the National Demonstration plots put up by scientists in the fields of poor peasants. In other crops like rice, Sorghum maize, millets and pulses, problems of management, pest control, storage, marketing and pricing require sophisticated and coordinated efforts of a type which few developing nations have yet generated. Consequently, a genuine feeling that they have been bypassed by the "green revolution" is growing in the minds of many farmers.

We are thus faced on one side by great scientific possibilities and on the other by vast problems of organisation, coordinated action, communication and population growth absorbing the fruits of all advance. Those who have the power and capacity to serve their fellow men - be they scientists, educationists, administrators or political leaders - have probably never had in human history so many challenging opportunities for service and for experiencing the thrill of fulfillment. What is needed is the will to act and the determination to learn and adopt the correct techniques of action, since Asian farmers have given ample evidence in recent years that they are ready for change, if the change is for the better economically.

I would like to end on a personal note. When over 10 years ago, my colleagues and I at the Indian Agricultural Research Institute embarked on a relentless pursuit of high incomes from farming through high yields without detriment to the long term productivity of the soil, we had hoped that the high yielding varieties would not only help to raise production but would also act as catalysts in bringing about a total transformation in the outlook and agronomic methodology of our rural community. Where sights are limited, action is equally circumscribed and cynical comment is the only reception accorded to new ideas. Mahatma Gandhi referred to this situation over 40 years ago, when addressing these who wish to work in Indian villages, he said "The fact is the villagers have lost all hope. They suspect that every stranger's hand is at their throats and that he goes to them only to exploit them. The divorce between intellect and labour has paralysed our agriculture. The worker should enter villages full of love and hope, feeling sure that where men and women labour unintelligently and remain unemployed half the year round, he working all the year round and combining labour with intelligence cannot fail to win the confidence of the villagers". I have had the privilege of personally experiencing the wisdom of Gandhi's recipe. Hence, while accepting the award for Community Leadership bearing the name of one, whose main characteristic was his passionate love of poor people, I plead in all humility with the young men and women in the Universities and Scientific Institutions of the Developing Nations to seize the opportunity and power given them by science to make real the possibilities of a truly human and meaningful life for millions of their fellow beings. It is to promote this cause that I propose to use the award. I thank you once again for the honour.

Ramon Magsaysay Award Foundation
Ramon Magsaysay Center
1690 Roxas Boulevard
Manila, Philippines