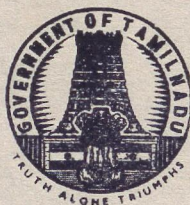


M.B. PRANESH, I.A.S.,
SECRETARY TO GOVERNMENT
PLANNING AND DEVELOPMENT DEPT.
Telephone: 561567



FORT ST. GEORGE
MADRAS-600 009
Telex: 562524 Fax: 567128

D.O Lr.No.12349/OP.II/92

Dated:16.10.92

Dear Dr. Swaminathan,

Sub: Establishment - State Planning
Commission - Part-Time Members-
Tenure of office - Further
continuance - Orders issued-Reg.

Ref: G.O.Ms.No.186 Planning and
Development (O.P.II) Department
dated 16.10.1992.

....

I enclose a copy of the orders of
the Government referred to above extending
your tenure of office for a further period
of one year w.e.f. 5.8.1992.

With Regards

Yours sincerely,

M.B. Pranesh

(M.B. PRANESH)

To

Dr. M.S. Swaminathan,
Member,
State Planning Commission,
MADRAS-600 005 (w.e.)

GOVERNMENT OF TAMIL NADU

ABSTRACT

ESTABLISHMENT - State Planning Commission - Part-Time Members.
Term of office - further continuance ordered.

PLANNING AND DEVELOPMENT (OP) DEPARTMENT

G.O.MS.NO. 186

DATED: 16-10-1992

READ:

- * 1. G.O.Ms.No.95, Planning & Development (OP) Dept
dated 5-8-1991
 - 2. G.O.Ms.No.112/ Planning & Development (OP) Dept
dated 21-8-1991
 - 3. From the Member Secretary, State Planning Commission
D.O. letter No. 2789/SFC/A2/92 dated 14-7-1992.
-

ORDER:

In G.O.MS.No.95, Planning and Development Department dated 5-8-1991 orders reconstituting the State Planning Commission with the following Part-Time Members were issued:-

- 1. Dr. M.S. Swaminathan
- 2. Dr. B.B. Sundaresan
- 3. Dr. M. Natarajan
- 4. Dr. Rajammal P. Devadoss
- 5. Dr. M.A.M. Rarasany

2. In the said order, the term of office of the above part-time members had been fixed initially as one year. This period expired on 4-8-1992. The Government hereby extend the term of office of the above Part-Time Members for a further period of one year with effect from 5-8-1992.

3. The terms and conditions of appointment of the above Part-Time members will continue to be as per G.O.Ms.No.112 Planning and Development (OP) Department dated 21-8-1991 already issued.

(BY ORDER OF THE GOVERNOR)

T.V. VENKATRAMAN,
CHIEF SECRETARY TO GOVERNMENT

To
The Member Secretary,
State Planning Commission,
Madras-5.

..contd...

Dr. M.S. Swaminathan,
11, Rathna Nagar,
Teynampet, Madras-18

Dr. B.B. Sundaresan,
76, I Avenue, Indra Nagar,
Madras-20

Dr. M. Natarajan,
Mahalinga Nilayam, 24 Lakshmi Street,
Madras.10

Dr. Rajammal P. Devadoss,
Vice-Chancellor,
Avinasilingam Institute for Home Science
Coimbatore.

Thiru M.A.M. Ramasamy,
Chettinadu House,
Madras-28

P.A. to Hon'ble Chief Minister, Madras-9

P.A. to Hon'ble Minister for Finance, Madras-9

The Accountant General, Madras-18 (by name)

The Accountant General, Madras-9

The Pay and Accounts Officer, Madras-9

The Pay and Accounts Officer (East)

Madras-5

Copy to: P&D(OP) Department.

//Forwarded/By order//

K. Vasanth Kumar
SECTION OFFICER. 16/10/92

5/10/92
16/10/92

MSS/SS/4170
17 October, 1992

Thiru. M.B. Pranesh
Secretary to Government
Planning and Development Dept.
Fort St. George
Madras 600 009.

My dear Thiru. Pranesh,

I thank you very much for your kind letter D.O. Lr.No.12349/OP.11/92 dated 16.10.92 informing me that my tenure as a part time member of Tamil Nadu Planning Commission has been extended until 5.8.1993. I shall be happy to serve in this capacity and render whatever help I can in promoting sustainable livelihood and food security in Tamil Nadu. I enclose copies of 2 recent papers dealing with these issues.

1. Magna Charta of Universities
2. Building a sustainable Rural Livelihood Security System

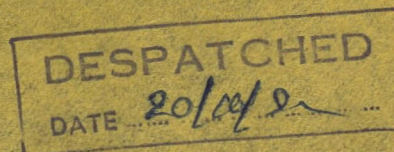
With regards,

Yours Sincerely,



M.S. Swaminathan

Encl: 2 papers



Back to me
←

Magna Charta of Universities

M.S. Swaminathan

Centre for Research on Sustainable Agricultural
and Rural Development, Madras

On September 18, 1988, the University of Bologna in Italy commemorated its 900th Anniversary. On that occasion 450 Rectors and Vice Chancellors from all over the world signed a " Magna Charta Universitatum ". The Magna Charta stipulated the following three fundamental principles which must, now and always, support the vocation of Universities,

"1. The university is an autonomous institution at the heart of societies differently organised because of geography and historical heritage; it produces, examines, appraises and hands down culture by research and teaching.

To meet the needs of the world around it, its research and teaching must be morally independent of all political authority and intellectually independent of all political authority and economic power.

2. Teaching and research in universities must be inseparable if their tuition is not to lag behind changing needs, the demands of society, and advances in scientific knowledge.

3. Freedom in research and training is the fundamental principle of university life, and governments and universities, each as far as in them lies, must ensure respect for this fundamental requirement.

Rejecting intolerance and always open to dialogue, University is an ideal meeting-ground for teachers capable of imparting their knowledge and well equipped to develop it by research and innovation and students entitled, able and willing to enrich their minds with that knowledge."

On September 18, 1992 14 Vice Chancellors of Indian Universities signed this Magna Charta on the occasion of a special Indo-Italian Symposium hosted by the University of

Bologna. Dr. U.R. Rao and I were conferred honorary doctorate degrees by the University of Bologna on that occasion. My acceptance speech on that occasion is the basis of this article.

Long ago, the Roman Philosopher Seneca said " a hungry people listen not to reason nor cares for justice, nor is bent by prayers ". Mahatma Gandhi expressed the same sentiment when he said "to the hungry, God is a loaf of bread". The television pictures we see daily now of starving children, women and men in Somalia testify the truth underlying the statements of Seneca and Gandhi. In 1964, Paul and William Paddock predicted a fate similar to "sheep going to a slaughter house" to the people of India by the year 1975. It may hence be appropriate to indicate the dimensions of India's accomplishments on the food security front.

The British colonial period began with drought and famine in Bengal in 1770, during which one-third of the population of the province perished. Just prior to the end of the colonial era, another great Bengal famine occurred during 1942-43, when about 3 million people died of hunger. Between 1770 and 1880, as many as 27 scarcities and famines were recorded. Twenty million lives were lost in about 20 famines during the period 1850 to 1900.

The population of the Indian sub-continent (including Pakistan and Bangladesh) was less than 300 million when great famines claimed numerous lives. The 1891 population figure of undivided India was 282 million. 10 million people died in a big famine in 1892. Today, the population of India alone is about

875 million and the population is growing by over 15 million each year. Yet, famines have been avoided since the country became independent in 1947. In 1965-66 food production was affected adversely by drought but there were no famines thanks to extensive food imports, largely under the PL 480 programme of the United States of America. Since the early seventies, the country prevented famines even during adverse weather conditions through a carefully designed food security system involving the maintenance of both substantial grain reserves and an extensive public distribution system. The food grain reserves were built largely from home grown wheat and rice, since from the late sixties, the rate of growth in food production generally exceeded the rate of growth of population. Timely imports both on concessional and commercial terms were made to replenish stocks in years when they were depleted due to widespread drought. By any standard, Independent India's famine avoidance strategy is a remarkable achievement. How did this happen ?

Three major groups of factors were involved. First, farm men and women, whether literate or illiterate, took to new technologies with enthusiasm and efficiency, provided they were convinced that the change will help to improve their livelihoods and provided they were enabled to adopt them through appropriate public policies in input pricing and supply and output pricing and procurement.

Second, the country had the wisdom to invest on agricultural research and education and build a national grid of research

institutions, agricultural, rural and womens' Universities and grassroot level training organisations like Krishi Vigyan Kendras. Not only the Indian Council of Agricultural Research (ICAR), the national agency for agricultural research and education, but the entire scientific community working in the laboratories of the Ministries of Science and Technology, Environment and Forests and Commerce, and the Council of Scientific and Industrial Research (CSIR), Departments of Atomic Energy, Biotechnology, Space, Electronics and Ocean Development, Indian Council of Medical Research (ICMR) and general Universities supported by the University Grants Commission did their best to assist rural areas with new technologies. International collaboration also helped much, particularly with Institutions supported by the Consultative Group on International Agricultural Research (CGIAR). Experience has shown that without a strong and dynamic national research system, advantage from international research will be minimal. This was clear from the rapid progress made in the country in wheat and rice improvement based on the initial material supplied by Dr. N.E. Borlaug from Mexico and by the International Rice Research Institute in the Philippines.

A third but vital contributory factor was government policies and programmes in rural techno-infrastructure development such as roads, irrigation, electrification and other forms of energy supply, extension services and markets. Land reform, remunerative pricing policies, credit supply, development of efficient extension services and various other forms of support to small and marginal farmers became possible due to

political will and foresight and administrative action. In the mid-sixties, the country was fortunate to have Shri. C. Subramaniam as Food and Agriculture Minister and Shri. Lal Bahadur Shastri and Smt. Indira Gandhi as Prime Ministers, who were determined to make the country self sufficient in food requirement. Administrators like the late Shri. B. Sivaraman converted the political vision into practical programmes.

Thus, mutually reinforcing packages of technologies, services and public policies made it possible for farmers to make the country self-sufficient in food grains at current levels of purchasing power. By mid-seventies, the challenge shifted from physical to **economic access** to food. Inadequate opportunities for off-farm employment and inadequate attention to social organisation in rainfed areas with regard to saving and sharing water and to post-harvest technology, including biomass utilisation, led families without land or livestock or fish pond or trees remain under-employed or often unemployed. India's malnutrition problem thus became largely one of under-nutrition or calorie deprivation. It is estimated that over 200 million children, women and men living in poverty now suffer from chronic hunger. While famines have been avoided, chronic hunger persists and without jobs for all, this problem cannot be solved.

Therefore, the challenge facing the country today is achieving sustainable nutrition security, which involves physical and economic access to balanced diets and safe drinking water to all citizens. Only nutrition security at the level of individual households can ensure that children have an

opportunity for the full expression of their innate genetic potential for physical and mental development.

India has now nearly 100 million operational holdings. 25% of the world's farmers are in India. India has also 20 percent of the global farm animal population. At the current rate of population growth, India will have over 1000 million people at the beginning of the 21st century. Compounding the problem of increasing economic marginalisation of the rural and urban poor, is the growing damage to the ecological foundations essential for sustainable agriculture. Over 100 million ha of potential farm land have undergone varying degrees of degradation. Even now, there is no policy for preventing the diversion of prime farm land for non-farm uses. The same is true of groundwater resources which are often being exploited in an unsustainable manner. Habitat destruction is leading to the loss of biological diversity. Protecting the already protected areas is proving to be a formidable task. In intensively farmed areas, biotic and abiotic stresses are increasing.

The challenge before scientists, political leaders and farmers is - how can agriculture yield more food, jobs and income in rural areas under conditions of shrinking land and fresh water resources, expanding biotic and abiotic stresses, loss of biological wealth and potential changes in climate, sea levels, and ultraviolet-B radiation? Sharing of research data, processes and products at the international level is also likely to be hampered in the future, due to the growing privatisation of applied research in industrialised countries.

Obviously, there is no simple or single solution to the complex ecological, socio-economic and technological problems facing those engaged in promoting sustainable advances in the productivity of terrestrial and aquatic farming systems. I can see no way of facing the scientific challenge except through accelerated efforts in the blending of traditional wisdom and technologies and modern technologies. The new technologies of particular interest to agriculture are biotechnology, information technology, space technology, micro-electronics and management techniques. Italian scientists like Prof. Umberto Colombo have demonstrated the value of technology blending in the textile industry. Italy has been so far the only industrialised nation which has promoted biotechnology research in the public sector through the International Centre for Genetic Engineering and Biotechnology (ICGEB) located at Trieste and New Delhi.

Sustainable agriculture will be possible only with location-specific technologies. Agenda 21 of the UN Conference on Environment and Development has stressed that a special anti-poverty strategy is a basic condition for ensuring sustainable development. Unless a pro-poor bias is imparted in technology development and dissemination, resource poor farm men and women will derive little benefit from the onward march of science, particularly in the area of biotechnology. This is where the initiative of the University of Bologna in forming a global consortium of Universities committed to the improvement of the quality of human life within the carrying capacity of the

supporting ecosystems is a timely one. We need similar consortia at the national level.

The Bologna Magna Charta provides a new vision for partnership between Universities and the societies which support them. Obviously our first priority should go to solving the most serious problem of today, namely the growing gap between the rich and the poor. UNDP's Human Development Report of 1992 indicates that over 82% of global income now goes to 20% of the human population. The poorest 20% receive only 1.4% of the annual world income. Such a deplorable situation is true both internationally and nationally and is the root cause of chronic hunger affecting over 600 million children, women and men. Unsustainable life styles and unacceptable poverty are both threatening the ecological security and social stability of our Planet. Expansion of ethnic conflicts and increased violence to both nature and fellow human beings will be the result of the widening income disparities among members of the human family. A combination of political will and scientific skill will be necessary to arrest and reverse this trend.

Let me illustrate what Universities can do to assist in linking the ecological security of rural areas with the livelihood security of rural families by taking three examples from the work of the Centre for Research on Sustainable Agricultural and Rural Development, Madras.

First, to assist farmers to improve yield in a sustainable manner, a Biological Software Centre for Sustainable Mixed

Farming is being established in cooperation with the Tamil Nadu Veterinary and Animal Sciences University at Kattupakkam near Madras city.

One Component of this Centre relates to assembling products and processes which can help to maintain/enhance soil health and productivity. The software would include items which can help improve the chemical, physical and microbiological aspects of soil fertility maintenance.

Some examples of such software are:

- (a) Earthworm and Vermiculture
- (b) Nitrogen fixing trees and shrubs including stem nodulating species.
- (c) Rhizobial cultures, Azolla, Blue green algae.
- (d) Tree species like Neem whose seed cake promotes slow release of applied mineral fertilizer, and
- (e) Plants which help to control nematodes and soil pathogens.

The other components of this Centre would include gene pools for biotic stresses like pests and pathogens, veterinary pharmaceuticals of plant origin, medicinal plants and donors of genes providing tolerance to drought, floods, sea water intrusion and ultra-violet B-radiation.

The Biological Software library could provide the most appropriate material to users, depending on the nature of the soil and farming system.

Second, a Genetic Resources Centre for Adaptation to Sea Level rise has been established at Pichavaram near Chidambaram in Tamil Nadu jointly with the Tamil Nadu Department of Forestry and the Department of Biotechnology of the Government of India. This centre will concentrate on assembling specialised gene pools including Mangrove species and sea grasses which may provide genes conferring tolerance to sea water intrusion for use in recombinant DNA experiments.

Third, a Biovillage programme has been initiated in Pondicherry in collaboration with the administration of Pondicherry for incorporating appropriate biotechnological innovations in current practices in order to combine the ecological and economic strengths of both. A methodology has been developed to ensure that the benefits of biotechnological enterprises reach women and landless labour families.

These few examples would help to indicate that opportunities now exist for imparting a pro-environment and pro-poor bias in scientific work. Modern information technology enables the packaging in an integrated manner farming system-specific meteorological, management and marketing information. Rural families can be reached through a computer-aided extension system. Ecologically sound technologies involve the substitution of knowledge for chemicals and capital and hence an effective information system is vital for promoting sustainable agriculture.

Our Universities, individually and jointly, can initiate faculty-student projects designed specifically to providing such scientific services to the rural and urban poor. Science will then assume a powerful social purpose.

The flame of inter-University partnership lit by the University of Bologna on the occasion of its 900th anniversary needs to be nourished and supported like an Olympic torch. This timely initiative reminds me of a verse written by Ranier Maria Rilke in 1899:

"Again & Again in History

Some special people wake up

They have no ground in the crowd

They move to broader laws

They carry strange customs with them

And demand room for bold and audacious actions

The future speaks ruthlessly through them

They change the world"