

Anthyodaya calls for a new type of planning, a new approach to administration, new values and an altogether new ethos. Obviously, this can be achieved only by developing programmes which can lead to mass action by the community as a whole. We are hence happy that Dr. Tolba has rightly stressed the need for popular participation on the part of the land-user in efforts to save the land and to develop it to a state of high productivity.

3. The Government of India has accorded the highest priority to agriculture and rural development. It is also the desire of my Government that every citizen of India should have the opportunity for gainful employment within the next ten years. For achieving this goal, speedy reclamation of areas affected by different processes of desertification is exceedingly important. We are also now in the process of preparing the Sixth Five Year Plan. This Conference is, therefore, timely in as much as we hope to benefit from it in terms of ideas, in terms of action plans and in terms of possible additional resource availability in a crucial sector of our development effort.

4. Mr. President, the problem of desertification in India is unique in that the Indian desert is the most densely populated in the world with 61 persons per sq. km. as against 3 persons per sq. km. in most other desert areas. Drinking water may not be available in these areas during some months of the year and consequently man, cattle and sheep are forced to lead a nomadic existence. Nevertheless, the people in these areas have a very cheerful

temperament since they live in the hope that some day conditions of life will become less harsh. Will this Conference make their hope come true?

5. We have in India examples of three major kinds of desertification processes. First, the arid zone which is part of a vast belt running from the Atlantic Ocean to China, occupies about 12 per cent of our total geographical area. Secondly, we have problems of alkalinity and salinity in fairly large areas in the semi-arid and arid areas as well as north-west India. Thirdly, in some areas, particularly along the Himalayas, we have severe problems of soil erosion arising from excessive deforestation, over-grazing, shifting cultivation and other forms of improper land use. Sea erosion and encroachment of salt water are also problems in our coastal areas. Therefore, we generally support the operational definition of desertification given in the Draft Plan of Action, which refers to desertification as "diminution or destruction of the biological potential of land".

6. After India became independent 30 years ago, steps were taken to enlarge our knowledge and technical capability in combating the process of aridity. Research on the problems of the arid zone was started 25 years ago at Jodhpur in Rajasthan and my delegation had the pleasure of presenting to the distinguished delegates a publication on "Desertification and its Control" brought out by the Indian Council of Agricultural Research, specifically for distribution at this Conference. This publication summarises the results of the research work

done in my country on the desertification process and its control. We have also distributed a Country Report which indicates the human dimensions of the problem and the various steps taken by the Government of India to minimise the hardship caused by desertification to the inhabitants of the affected areas. You have also in your hands the case study carried out by the scientists of the Central Arid Zone Research Institute, Jodhpur.

7. The pressure of population on land is already very high in most parts of India. Our population is expected to exceed over 900 million by 2000 A.D. We have to produce the additional food needed for this population from the limited land available which is becoming even less because of the increasing utilisation of land for other purposes such as industry, housing and communication. Land is thus the most precious of our agricultural assets. Hence, it is of supreme importance that we do not permit depreciation in fertility or production potential of our soil. We can increase the intensity of cropping since we are blessed with abundant sunlight throughout the year, provided there is water. The Government of India has accorded the highest priority to increasing the area under irrigation. It is the desire of my Government to extend the irrigated area to 107 million ~~hectares~~, which is the projected possibility for generating irrigation facilities, as early as possible.

8. Irrigation particularly in arid and semi-arid areas, may cause other problems such as alkalinity and salinity. Therefore, an integrated approach to soil

and water management is absolutely essential right from the beginning. We are establishing a Command Area Authority for every major irrigation project which can look at the problems of efficient water use in their totality. Thanks to the work done by the scientists of the Central Arid Zone Research Institute, technologies for the control of desertification for introducing more scientific land and water use patterns have become available. Similarly, as a result of the work done at the Central Soil Salinity Research Institute at Karnal, we are in a position to embark on a large programme for the reclamation of alkaline soils. However, the gap between the yields obtained in demonstrations carried out by scientists in farmers' fields and the average yield in the same area is very wide. This gap which gives a measure of the untapped yield reservoir existing at current levels of technology can be appropriately termed an extension-cum-management-cum-resources gap. Scarcity of resources frequently acts as the most important limiting factor. In the absence of insurance, risk and uncertainty make small and marginal farmers reluctant to avail of institutional credit, even if available. Efficient management in such problem areas cannot be done by individual farmers alone. A group or collective approach among all the inhabitants in a watershed will have to be generated. This is where social engineering becomes vital to the success of the programme. Unfortunately, the social and organisational aspects of management had not received adequate attention in

the past. Social engineering will be facilitated if the requisite political will for generating cooperative endeavour exists. Ultimately it is only the fusion of political will and professional skill that can help to transform technological possibilities into practical accomplishments. My delegation is hence happy to see the emphasis placed on this aspect in the Conference documents.

9. A wide range of research and developmental initiatives that need to be taken up immediately to achieve the goals of this Conference are stated clearly in the Conference documents. In our view the following four areas need added stress.

First, research needs to be stepped up on medium term weather forecasting to provide early warning of unfavourable weather conditions and on weather modification so as to promote precipitation in the catchment areas of tanks and reservoirs in arid areas. The World Meteorological Organisation is already seized with this problem but we would like to see greater urgency and support imparted to the programmes in this area.

Second, the problems of women and children in the desert areas need much greater attention. Often, women and children have to walk miles every day to fetch water and firewood. The children by the very nature of the nomadic life of the parents as well as of their economic condition are born "left-outs" or

"drop-outs" of the traditional school system. Unless the school moves out to the meadows where the children tend the cattle and sheep or collect twigs, or else, classes are organised in the evenings, they have no hope of becoming literates. While this has to be primarily a national effort, organisations like UNESCO and UNICEF can also assist in solving the problems of children who by compulsions of ecology and economics are obligatory optees out of the traditional educational system. Similarly, women cannot come to residential courses. Benefits of new technology like solar energy and water harvesting will tend to bypass them unless mobile training teams are organised. There is also urgent need for technologists to develop simple low-cost devices from locally available material which will help to reduce drudgery in the day to day life of rural women.

Third, there is in our view need for more intensive research on the selection and breeding of shrubs and trees for the arid and semi-arid areas which can fulfil the triple needs of fuel, fodder and fertilizer. Leguminous plants are obviously necessary to meet this triple purpose. They should be quick growing and should possess hybrid vigour for root growth. We would suggest that an Expert Group of specialists in genetics and silviculture may be convened for developing a strategy for breeding and selection of fuel-cum-fodder-cum-fertilizer trees and shrubs.

Fourth, there is need for more research on the kinds of agro-industries and rural industries that can be promoted in arid areas. "Desert agro-industrial Complexes" will have to be designed based on local material and readily available forms of energy which can help to eliminate unemployment and under-employment and thereby create conditions which render nomadism unnecessary.

10. In the global effort to combat desertification, India would be happy to share the capabilities it has developed and the experience it has gained in this field. Specifically, India is prepared to offer:

- (a) Facilities for training at the Central Arid Zone Research Institute, Jodhpur, the Central Soil Salinity Research Institute, Karnal and the Sheep and Wool Research Institute, Jaipur and other centres of research and training.
- (b) Training in our Drought-Prone Areas Programme which covers many of the desert areas of Rajasthan.
- (c) Active collaboration in monitoring desertification processes and in the compilation of integrated resource inventories through the National Remote Sensing Agency, the Indian Space Applications Research Centre, the National Bureau of Soil Survey and Land Use Planning, the Central Arid Zone Research Institute, Jodhpur and other organizations.

(d) Participation within the limits of our resources in specific regional, inter-regional and global projects designed to improve the lot of the people affected by the desertification process.

11. While self-help is the underlying philosophy of our developmental efforts, external assistance helps to supplement local resources and thereby helps accelerated progress. We have in the past received assistance from several friendly countries such as Australia, Canada, France, USA and USSR in initiating improved management techniques in arid and semi-arid areas and in research and development. International agencies concerned have also been most helpful in many ways.

12. The definition of desertification given in the Draft Plan of Action is wide enough to encompass processes caused by extreme hydrological phenomena such as floods, droughts, etc. This requires both national effort for water management and in the case of shared water resources, co-operation between the countries concerned. As regards the international rivers which we share with our neighbours, our quest has been for bilateral cooperation on the basis of mutuality of interest, understanding of each others' problems and where necessary, the willingness to share sacrifices on an equitable basis. We have institutional frameworks of cooperation with each of our neighbours. A considerable amount of investigative and directly beneficial work is being carried out. Our flood forecasting network to arrest disasters has regularly provided

relevant data to our neighbours. We have also been in favour of and have taken active part in expediting the ongoing work on the progressive development and codification of international law of waters. It is our belief that the decision adopted at the UN Water Conference would provide further impetus to international effort in this area. Taking note of this decision, we should concentrate on the issues which led to the convening of this Conference by the U.N. General Assembly.

13. We hope that following this Conference, the flow of appropriate assistance from the developed to the developing countries will increase. Such assistance should be designed to have a multiplier effect on indigenous efforts, by supplementing national action rather than by substituting local leadership and endeavour. Synergy and symbiosis should be the guiding principles in international collaboration.

14. In order to ensure effective follow-up of the Action Plan recommended by this Conference and the appropriate channelization of international cooperation, it is necessary that a milestone chart should be developed indicating year by year the precise tasks and targets that should be accomplished. A suitable monitoring mechanism will have to be established to assess the progress in combating desertification. The monitoring mechanism should not merely be concerned with criteria based on ecology and economics but should measure achievements in human terms in respect of the satisfaction of the basic human needs of the people affected by desertification, and generation of additional opportunities for their

relevant data to our neighbours. We have also been in favour of and have taken active part in expediting the ongoing work on the progressive development and codification of international law of waters. It is our belief that the decision adopted at the UN Water Conference would provide further impetus to international effort in this area. Taking note of this decision, we should concentrate on the issues which led to the convening of this Conference by the U.N. General Assembly.

13. We hope that following this Conference, the flow of appropriate assistance from the developed to the developing countries will increase. Such assistance should be designed to have a multiplier effect on indigenous efforts, by supplementing national action rather than by substituting local leadership and endeavour. Synergy and symbiosis should be the guiding principles in international collaboration.

14. In order to ensure effective follow-up of the Action Plan recommended by this Conference and the appropriate channelization of international cooperation, it is necessary that a milestone chart should be developed indicating year by year the precise tasks and targets that should be accomplished. A suitable monitoring mechanism will have to be established to assess the progress in combating desertification. The monitoring mechanism should not merely be concerned with criteria based on ecology and economics but should measure achievements in human terms in respect of the satisfaction of the basic human needs of the people affected by desertification, and generation of additional opportunities for their

gainful employment.

15. It is also obvious we should have a follow-up machinery which is capable of action and achievement, Nearly all UN Agencies are involved in some way or the other in tackling the problems of arid and semi-arid areas. They have to be brought together to work in the same way as members of a symphony orchestra do. We have doubts whether a Working Group on Desertification of the UN Environment Co-Ordination Board will be able to conduct such a symphony orchestra. We should, therefore, like to propose the following mechanism.

16. First, a Consultative Group for the Control of Desertification (CGCD) be established jointly by UNEP, FAO, UNDP, UNESCO, WMO, IBRD and IFAD (International Fund for Agricultural Development). While the decision on the Secretariat of this Group will ultimately rest with its co-sponsors, we consider UNEP the most appropriate for this purpose in view of its commitment to this programme and the initiative it has already taken in this matter. Second, immediately, after its establishment, the CGCD would form a consortium of international agencies, countries, regional banks, foundations and organizations interested in extending financial support to programmes in this field. Such a consortium should be able to generate substantial resources for meeting the needs of worthwhile programmes and projects, as experience with the Consultative Group on International Agricultural Research has already shown. Third, the Consultative Group could be assisted by a Technical Advisory Committee on the lines proposed in the Draft

Plan of Action, the main task of which will be to develop a portfolio of projects for consideration of the CGCD. Fortunately, several projects have already been drawn up by the Secretariat so that the Consultative Group will have sufficient proposals for consideration immediately, after its formation. A Consultative Group-cum-Technical Advisory Committee mechanism could provide an organized forum for generating multi-lateral resources and for stimulating bilateral and multinational collaborations. It will provide a forum for Governments, international agencies, Banks and voluntary organizations to join together in accomplishing the goals that may emerge from this Conference. Membership of the Consultative Group for the Control of Desertification should include not only donors but also some of the countries seriously affected by desertification. My delegation proposes to move suitable amendments in the relevant resolution of the Draft Plan of Action in the Committee of the Whole and we will welcome discussion with other delegations who have suggestions on developing an effective follow-up-machinery.

17. Mr. President, my Delegation is deeply conscious of the crucial importance of this Conference. It is basically designed to husband our inelastic land resources against the onslaught of both natural and man-made factors, and thus contribute to the well-being and prosperity of both present and coming generations. This Conference is also unique among the world-wide Conferences convened by the United Nations in that it aims to come to the rescue of some of the most under-privileged sections of

humanity. If the Conference succeeds in its aims, it would have ushered in a new age of humanism which enables the conversion of the explosion of scientific and technical know-how into human welfare. Mahatma Gandhi's dream of anthyodaya will then come true. India hence pledges its full cooperation in this objective and will exert maximum efforts to contribute to the implementation of the plan of action which would emerge from the deliberations of this Conference.

Thank you, Mr. President.

..O..

•

•