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Ensuring Access to Balanced Diets and Safe Drinking Water

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In an earlier paper¹ I had explained why we should shift the attention of political and development leaders from the concept of food security to one of nutrition security. FAO estimates that at present, while 800 million children, women and men are under- and mal-nourished, over 2 billion suffer from "hidden hunger" caused by deficiencies of micronutrients. Lack of access to safe drinking water further compounds the problem, by enhancing various forms of intestinal infection. Nutrition security is thus fundamental to achieving the goal of providing to every individual opportunities for a productive and healthy life. If children are to be born for happiness and not just for mere existence, there is need to stabilise human numbers at a level that the concerned ecosystem can support. I shall therefore deal with this issue first.

Population stabilisation: A National Committee had recommended a paradigm shift in our approach to achieving the desired demographic transition to low birth and death rates (Table 1).

To reduce IMR, MMR and low birth weight among children, it is essential to work for food security at the level of each individual, since the household is not a homogenous unit with reference to nutrition. Women and girl children often tend to be relatively undernourished. Also to check female foeticide, rigorous steps should be taken to stop sex-based abortion. To create awareness on these issues, there is need for a socio-demographic

charter at the level of each village, town and city.

Major components of socio-demographic charters: Socio-demographic charters are planning tools at the grassroot level and hence should be prepared by the people themselves so as to better reflect their aspirations and priorities. A hierarchy of unmet needs can then be spelt out, starting with the most pressing need. Plan implementation and resource allocation can concentrate on meeting the hierarchical needs in a phased manner. A sense of recognition and self-worth will promote community spirit in problem solving.

With such a broad aim of unity in goal and diversity in implementing strategies, the charters would tailor policies and programmes to suit the socio-cultural and economic conditions of the area. The area specific issues will be many and varied across situations. Yet, these issues can be grouped under broader issues that can form an integral component of the socio-demographic charter. Among them, the following are important.

● **Environment:** Environment protection and the conservation and equitable use of common property resources are issues that are, to a large extent amenable to local control. The degradation of environment in villages, towns and cities is now seriously threatening the sustainability of the ecosystem. The local bodies need to incorporate in their plans, mechanisms to prevent loss of top soil, depletion of underground water, pollution of lakes

and rivers, deforestation, loss of grazing lands, conversion of forests into agricultural land and air pollution. Waste management and sustainable lifestyles, especially in the urban centres, are needed because these have implications for the ecology of the rural areas. Both in urban and rural areas, houses should be designed in a manner that they harvest and conserve rain water. Incentives for promoting renewable energy sources should be introduced. Conservation of biological-diversity and promotion of sustainable development should be the watchword. The steps necessary for managing the common property resources of the area in an equitable and sustainable manner will also have to be developed.

● **Hygiene and housing:** This would include mechanisms for safe disposal and recycling of garbage, sewage and human wastes. Sewage treatment and waste disposal should form part of housing design. Water storage tanks and ponds should be disinfected to prevent breeding of mosquitoes and made mosquito-proof. In both rural and urban areas, water and electricity shortages are widespread. Housing

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TABLE 1
Paradigm Shift Recommended by the Swaminathan Committee (1994)

Existing Strategy	Swaminathan Committee
Target and technology driven approach	Human and social development centered. Effective implementation of Minimum Needs Programme
Think and plan centrally and act locally	Think, plan and act locally and support nationally
Awareness Generation: National slogans, symbols, and educational strategies	Sensitisation and self-awareness of rural and urban communities concerning the population – supporting capacity of their ecosystem
Planning Tool: Five-year plan of the Department of Family Welfare, Government of India	Socio-demographic charter for the village/ town prepared by the people
Delivery Services: Contraceptive services	Integrated health security including reproductive health and user-preferred family planning services.

designs should have in-built mechanisms for harvesting sun and rain. Methods of recharging ground water should also form part of the landscape.

● **Health security:** This would include reproductive health issues like maternal and child health care services, gynaecological and sexual problems, safe abortion services, reproductive health education, HIV/AIDS and sexually transmitted diseases. It would also include provision of safe and affordable contraceptives with adequate emphasis on reproductive tract infection and follow-up. Adequate emphasis would be given to the prevention of infant mortality and morbidity especially reduction of peri-natal mortality, by ensuring deliveries at the hands of trained personnel. The quality aspects of contraceptive services should receive particular stress.

● **Education:** This would ensure higher enrolment in primary schools, reduce push-outs with particular attention being paid to adolescent girls. Equal emphasis would be given to non-formal and technical education. Special attention would be paid to adult literacy, continuing education and skill upgradation. Awareness generation should be the long-term aim of education so that effective attitudes and behaviour are fostered among the population.

● **Nutrition security:** This would aim at enabling economic and social access to balanced diets and safe drinking water. Special emphasis would

be given to nutritional supplementation of pregnant mothers and under-five children and to eliminating micronutrient deficiencies. The charters would focus on gender disparities with regard to nutritional intake. Since over 70 per cent of our population is dependent on agriculture, crop-livestock integrated farming should be encouraged so that crop diversity can provide for a balanced diet. Since forests provide many communities with dietary supplements and also food, the need to protect forests as a means of ensuring nutrition security should be emphasised. For ensuring economic access to food, greater attention has to be paid to both on-farm and non-farm livelihood opportunities.

● **Gender code:** Gender analysis focuses on understanding and documenting the differences in gender roles, activities, needs and opportunities in a given context. Gender analysis involves the disaggregation of quantitative data by gender. It highlights the different roles and behaviour of men and women based on gender attributes. These vary across cultures, class, ethnicity, income, education and time; gender analysis does not treat women as a homogenous group or gender attributes as immutable.

Women's needs are better understood when viewed in relation to men's needs and roles and to their social, cultural, political and economic context. In gender analysis, women's roles in production, reproduction, and management of community assets and other activities are taken into ac-

count. Any change in one may produce beneficial or detrimental effects in others.

The gender module would emphasise steps to end all forms of gender inequity and discrimination including adverse sex ratios, inequitable property rights, dowry, female foeticide and infanticide, higher female mortality and morbidity, higher female illiteracy, feminisation of poverty and food security for women. The village/town level socio-demographic charters can thus become powerful tools in bringing about the desired demographic transition speedily.

MALNUTRITION FREE TAMIL NADU: NINE-POINT ACTION PLAN

To achieve the UN Millennium Development Goals in the area of elimination of hunger and malnutrition, we need carefully designed, affordable and sustainable strategies, involving a combination of monetary and non-monetary inputs and a symbiotic fusion of political action, professional guidance and peoples' involvement in all stages of the design and implementation of the strategy. Based on this guiding principle, the following nine-point action plan is being introduced in the State of Tamil Nadu, India, for enabling every child, woman and man to achieve her/his innate genetic potential for physical and mental development.

● **Who are the hungry?** Identification of the ultra-poor (per capita income US \$ 1 or less) and the malnourished is done by the local population (called Gram Sabha or Village Council in India). The approach is based on the principle of participatory democracy.

● **Household entitlements card:** Information empowerment on entitlements is vital for the poor to access the various provisions made in the Government Budget for assisting the poor, such as support for pregnant and nursing mothers, food-for-work programme, public distribution system, etc. The entitlements' database is disaggregated by age, gender, class and caste.

● **Eliminating protein-energy malnutrition:** Horizontal linkages among various vertically structured programmes designed to eliminate protein-calorie under- and mal-nutrition are introduced, so that there is convergence and synergy among all

on-going programmes. The strategy also involves the setting up of community managed Food Banks.

● **Eliminating "hidden hunger":** This involves education, cultivation and consumption of local foods, particularly leafy and other vegetables, and appropriate fortification of salt and other universally consumed commodities. Particular attention is paid to the elimination of deficiencies of iron, iodine and vitamin A.

● **Provision of safe drinking water:** This is vital for avoiding intestinal load of infection and diarrhoeal disorders. High priority is accorded to the provision of clean drinking water.

● **Attention to non-nutritional factors:** Environmental hygiene and primary education are accorded high priority. Linkages with health factors such as HIV/AIDS, tuberculosis, malaria and health literacy will be given considerable attention. Synergy will be brought about between the health and nutrition sectors.

● **Sustainable livelihoods:** Jobs or livelihoods will determine economic access to food. Today in many developing countries, including India, inadequate availability of livelihood opportunities leads to the poor surviving on uncertain daily wages. The poor are poor because they have no access to assets like land, livestock, fish pond or skilled work. Therefore, a twin strategy is being adopted. First, a paradigm shift from unskilled to skilled work is being achieved through the biovillage model of natural resources conservation and enhancement, gender equity and sustainable livelihoods. Second, sustainable self-help groups are being organised for undertaking micro-enterprises supported by micro-finance. Market-driven micro-enterprises coupled with micro-credit facilities are now resulting in a livelihood revolution. Both on-farm and non-farm enterprises are given equal attention. Self-help groups are also being trained to establish local level Food, Feed, Fodder and Water Banks.

● **Special attention to pregnant mothers and infants:** A massive programme for the elimination of maternal and foetal malnutrition is being launched in order to ensure the new born child has at least 2.5 kg birth weight. Every effort will be made to eliminate the causes for widespread prevalence of low birth weight children, since this is exceedingly important for giving chil-

dren an opportunity for the full expression of their potential for physical and mental development. Also, infants in the age group six months to two years will be given particular attention since ongoing programmes like the Integrated Child Development Service (ICDS) do not cover such young children. They have to be approached only through the parents.

● **Consultative group for malnutrition free Tamil Nadu:** Such a Consultative Group (CG) will include all concerned, such as government departments, civil society organisations including Rotary clubs, nutrition professionals, bilateral and multilateral donors and media representatives. Such a CG for ending malnutrition will undertake evaluation and monitoring of the work being done and help to fill critical gaps in the programme. The CG will serve as a coalition of all concerned by ensuring that the right to nutrition is a basic human right. The elected women members of local self-governance bodies, numbering nearly 100,000 in Tamil Nadu, will be trained to become catalysts of a Community Centred and Managed Sustainable Nutrition Security System.

Concluding comments: The challenges facing India today are not for the weak or timid. Nor is it a time to be discouraged or lose heart. This is the time for bold innovative action. Revolutionary efforts that destroy the status quo are necessary to remove barriers to progress, but they are not sufficient to realise our potential. Revolution needs to be supplemented by evolutionary efforts to consciously create the organisational foundations for a better common present and future. It is time to abandon half-hearted, half-way measures and show ourselves and the world what this nation can accomplish. In the present Knowledge and Innovations century, human development will hold the key to sustainable nutrition and livelihood security as well as to national well being. It is time to inspire our youth, which represent the best part of the population, and to fire them with enthusiasm to build a better India. The emergence of a caring, sharing and innovative India in the present century is a prospect well within our reach. It is our duty and privilege to work for this inspiring cause.

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Reference

1. Building national and global nutrition security systems. In: *Global Aspects of Food Production*, Tycooly International, Oxford 1986, pages 417-449.

NUTRITION NEWS

● **Infant milk substitute, feeding bottles and infant food (Regulation of Production Supply and Distribution) Act**

The Parliament of India has passed an act on infant milk substitute which provides regulation of production, supply and distribution of milk food substitute, feeding bottles and infant foods with a view to protect and promote breast-feeding and ensure proper use of infant foods. The technical recommendations in the Act are:

- Infants should be exclusively breast-fed for six months
- At six months, appropriate complementary food should be introduced to meet energy requirements for growth.
- Children should be breast-fed up to two years.

● **The National Nutrition Mission**

The Prime Minister has announced the setting up of the National Nutrition Mission, which would coordinate, and monitor:

- Implementation of National Nutrition Policy;
- Strengthening of the existing programme;
- Research and development;
- Nutrition education;
- Strengthening of ICDS and Mid Day Meal Programme; and
- Relief in natural calamities.

The Mission will be supervised by a National Nutrition Council headed by the Prime Minister.