Report comparing circumstances of your country with those of Japan

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- 1. Regarding agricultural instruction targeted at agricultural workers (based on your observations of Agricultural Improvement Centers and Agricultural Cooperatives)
 - (1) What kind of impression did you have when you observed the agricultural training systems for agricultural workers in Japan? (Please write your impressions from the perspective of both superior aspects and areas you thought to be problems.)

(Superior aspects)

- 1. Active Fundamental Research to develop Disease Resistant and High Yield Quality Crops
- 2.Fruitful Interchange of Information from Lab to Land and Land to Lab. (Seeds/Seedlings and Technology)
- 3. Active Participation of Farmers in the Management Reform Process through Extension Workers and Cooperatives
- 4. The key of Mutual Trust for Development in Harmony
- 5.Appreciative Cooperation and sharing of Knowledge/Technology among Universities/Research Stations, Extension Workers/Cooperatives and Farmers
- 6. Sophisticated Mechanization in Farming Activity
- 7.Continuous Agricultural Education through Agricultural Field Trips for Children (Kindergarten to High School)

(Areas thought to be problems)

- 1. Aging of Farming Community
- 2.Lack of Interest in Farming by the Younger Generation
- 3.Likely Decrease in Future Population and consequent reduction of Work Force & Industrial Leaders
- 4. High Production Costs, may be due to Mechanization & High Labour Cost etc;
 - (2) Are there organizations or agencies in your country that carry out agricultural training for agricultural workers? If so, please indicate in the space below the name of said organization, its positioning (in other words, whether it is a national or regional government organization, or a public foundation, etc.), comparing the work its carries out with the situation in Japan. If there is no such organization in your country, please indicate your own opinions about whether such on organization is necessary in your country, and whether it is possible for such a system to be introduced, and so on.

Though the Organizations and their functions may differ in INDIA and JAPAN, the basic Objective is the same: High Yield, Quality Production & Farmer's Welfare.

Agricultural Research & Training

1. INDIAN COUNCIL OF AGRICULTURAL RESEARCH (ICAR) and its allied Institutes like CENTRES OF EXCELLENCE FOR TRAINING, KRISHI VIGYAN KENDRAS etc;

*CENTRES OF EXCELLENCE FOR TRAINING (CET): Sixteen Centres of Excellence

Training have been established at Indian Council of Agricultural Research Institute / State Agricultural Universities and other Central Institutes to act as centers of training in various specialized subject matters.

- *KRISHI VIGYAN KENDRAS (KVK): responsible for vocational training, on farm research and demonstration of improved technologies through Institute-Village Linkage Programme.
- 2. DIRECTORATE OF EXTENSION, MINISTRY OF AGRICULTURE: Farmers-Scientist Interface on Agro-climatic Zone basis involve farmers through Farmers' Organizations and Non Governmental Organizations to play active role in the process of transfer of Farm Technology.
- *NATIONAL INSTITUTE OF AGRICULTURAL EXTENSION MANAGEMENT (MANAGE): Under the Directorate of Extension, this Institute caters to the training needs of Senior level Extension Managers at National level. It has four EXTENSION EDUCATION INSTITUTES at Regional level to provide training in Communication Technology, Extension Methodology, Training Management, Participatory Rural Appraisal Techniques, Management of Agricultural Information System, etc. to Middle level Extension Functionaries working under States/Union Territories.
- In addition, *STATE AGRICULTURAL UNIVERSITIES, *GRAM SEWAK TRAINING CENTRES, *EXTENSION TRAINING CENTRES and *FARMING TRAINING CENTRES also provide training to the Middle level and Gross root level functionaries and farmers.
- 3. STATE AGRICULTURAL MANAGEMENT AND EXTENSION TRAINING INSTITUTES (SEMATI) & AGRICULTURAL TECHNOLOGICAL MANAGEMENT AGENCY (ATMA): MANAGE is also playing a key role in the implementation of World Bank assisted National Agricultural Technology Project (NATP) by providing training support to SEMATIs and development of ATMA model of district level and undertake bottom up plans on strategic research and extension plans. Under each of the ATMA block level FARM INFORMATION AND ADVISORY CENTRES (FIACs) have been created which are operated by a BLOCK TECHNOLOGY TEAM (BTT) of technical advisor and a FARMER ADVISORY COMMITTEE (FAC), a group exclusively of farmers. Commodity oriented FARMER INTEREST GROUPS (FIGs) at village level are promoted at block (district) level to make the technology generation/dissemination farmer driven and farmer accountable.
- **4. FARM MACHINERY TRAINING AND TESTING INSTITUTE:** Imparts training to the farmers, technicians, nominees of Govts, retired/retiring defence personnel etc. in the selection, operation, maintenance, energy conservation and management of farm machinery.
- 5. NATIONAL HORTICULTURE BOARD: Provides training and education to farmers and processing industry personnel for improvement of agronomic practices and new technologies, promotes consumption of fruits/vegetables in fresh and processed form.
- 6. STATE LEVEL WATER AND LAND MANAGEMENT INSTITUTES (WALMI)

 / WATER AND LAND MANAGEMENT TRAINING AND RESEARCH INSTITUTES (WALAMTRI)

Cooperatives & Training

1.NATIONAL CO-OPERATIVE DEVELOPMENT CORPORATION (NCDC): NCDC has emerged as a national development financing institution for the cooperative sector in the country. A major

objective of the corporation is to promote, strengthen and develop institution of farmers' cooperatives for increasing production and productivity and instituting post harvest facilities for augmenting income.

- 2. NATIONAL AGRICULTURAL CO-OPERATIVE MARKETING FEDERATIOIN OF INDIA LTD (NAFED): NAFED is the apex level organization of Marketing Cooperatives in India. The main objectives are to organize, promote and develop marketing, processing and storage of agricultural, horticultural and forest produce, distribution of agricultural machinery, implements and other inputs and undertaking inter-State import and export of agricultural produce. It extends marketing support to the farmers in collaboration with State level Cooperative Marketing Federations, Primary Cooperative Marketing Societies.
- 3. NATIONAL COOPERATIVE UNION OF INDIA (NCUI): It implements a special scheme for intensification of Cooperative Education through Cooperative Education Field Projects. Besides, it monitors the education programmes being implemented by the State Cooperative Unions.
- 4. NATIONAL COUNCIL FOR COOPERATIVE TRAINING (NCCT): It conducts training programme for the middle and senior level personnel in cooperative sector. To the lower level of cooperative functionaries, training is provided by the JCTC run by the States/State Cooperative Unions.
 - (3) Are there matters that you would like to know more about in terms of the agricultural training system in Japan? If so, please indicate in the space below.

I would like to know the plans of the agricultural training system to tackle the above listed problems at (1).

- **2.** Regarding the Technology Support Association in the Land Improvement Program (based on observation of the Land Improvement Program Association Federation)
 - (1) What kind of impression did you have when you observed the Land Improvement Program Association Federation, an organization that carries out technological support for the Land Improvement Program in Japan? (Please write your impressions from the perspective of both superior aspects and areas you thought to be problems.)

(Superior aspects)

- 1. Technological Support for Improvement of Operational Efficiency
- 2.Creation of Pleasant Living and Working Environment for farmers
- 3.I nstantaneous Online Processing
- 4. Regular Land Development Plans (once in every 5 years)
- 5. Diverse Community Welfare Activities such as Rural Sanitation/ Sewerage Plans

(Areas thought to be problems)

- 1.Negligible Representation of Women in the System (No Woman Representatives and Woman Directors in Tottori Prefecture).
- 2. Coming up of Private Consultancy Firms
 - (2) Are there organizations or agencies in your country that carry out technological support for land improvement programs? If so, please indicate in the space below the name of said organization, its positioning (in other words, whether it is a national or regional government organization, or a public foundation, etc.), comparing the work its carries out with the situation in Japan. If there is no such organization in your country, please indicate your own opinions

about whether such on organization is necessary in your country, and whether it is possible for such a system to be introduced, and so on.

In India the water resources projects are executed, operated and maintained by the respective STATE IRRIGATION DEPARTMENTS. It is the responsibility of the Project authorities to ensure water supplies up to the outlet level. The WATER USER ASSOCIATIONS have the role of distribution of water delivered at the outlet and support collection of irrigation cess. While this is the case with surface irrigated agriculture, the rain fed farming and ground water irrigation are individual farmer oriented.

(3) Are there matters that you would like to know more about in terms of the technological support association in the Land Improvement Program? If so, please indicate in the space below.

Enough information was provided.

- **3.** Regarding plans and implementation of the Land Improvement Program (based on observation of the Oide and Hojo Dune District of Land Improvement)
 - (1) What impressions did you have when you observed the Land Improvement Program plans and methods of implementation in Japan? (Please write your impressions from the perspective of both superior aspects and areas you thought to be problems.)

(Superior aspects)

1. More Efficient use of Land Improvement Facilities

2.A Good Organizational Support for farmers

(Areas thought to be problems)

GENERAL:

- 1. Shortage of Funds & Tight Budget
- 2. Unpaid dues of Membership fee by farmers mounting up (Heavy burden, unsatisfied with districts)
 - (2) What impressions did you have when you observed the organization and management systems of the land improvement zones that carried out the planning and implementation of the Land Improvement Program in Japan? (Please write your impressions from the perspective of both superior aspects and areas you thought to be problems.)

(Superior aspects)

HOZO DUNE:

- 1. A Testimony of hard work by the people against all odds (Measures to prevent the damage to lands from sand storms)
- 2. Quality Production free from being dependant on Weather
- 3. Automatic Control of Water Supply for Equitable Distribution

OYDE CHANNEL:

- 1.Good Understanding and Harmony among Left bank and Right bank farmers (No Disputes for Water Rights)
- 2.A Testimony of hard work by the people against all odds (Surveys and Construction during nights and using lanterns)
- 3. Good Care of the Channel by the people

(Areas thought to be problems)

OYDE CHANNEL:

1.Hardly Sustainable I ncome for Paddy growing farmers. While the membership fee for HOZO dune farmers is about 8700 Yen who grow fruits and vegetables, the membership fee in case of OYDE farmers is just 1500 yen. The farmers are unable to pay even this amount.

2. Reduction in Paddy Farmland and its Conversion for other purposes.

(3) Are there organizations or agencies in your country that carry out planning and implementation of land improvement programs? If so, please indicate in the space below the name of said organization, its positioning (in other words, whether it is a national or regional government organization, or a public foundation, etc.), comparing the work its carries out with the situation in Japan. If there is no such organization in your country, please indicate your own opinions about whether such on organization is necessary in your country, and whether it is possible for such a system to be introduced, and so on.

As already mentioned, Water Users Associations play an important role in Participatory Irrigation Management in India. Also, the irrigation systems in India are quite large compared to those in Japan. Unlike Land Improvement Districts and Federations in Japan where farmers exercise O&M of entire irrigation systems from head works to the end reach, the domain of Water Users Associations is rather limited. Water conservation techniques like sprinkler and drip irrigation are yet to pick up momentum in India, though the Govt. has been encouraging through subsidies. The National Commission for Integrated Water Resources Development recommended for canal

The National Commission for Integrated Water Resources Development recommended for canal automation, legal support and autonomy for Water Users Associations and switching over to Participatory Irrigation Management (minor rivers and streams). It will be a welcome changeover from a State- run Irrigation system to a People- run Irrigation system.

(4) Are there matters that you would like to know more about in terms of the planning and implementation of the Land Improvement Program? If so, please indicate in the space below.

Sufficient information was provided.

- **4.** Regarding UNCCD (United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa)
 - (1) Has your country joined the convention? If so, when did your country join?

Yes, India joined the convention in 1994 and it is a signatory to UNCCD.

(2) Is your present agency working concerning the convention? If so, what work is your present agency doing?

Ministry of Environment and Forests (MOEF), Govt .of India is working concerning the convention. My organization is National Water Development Agency (NWDA), a Govt .of India society under the Ministry of Water Resources. NWDA is entrusted with conducting feasibility studies for the inter-basin water transfer link projects under Peninsular and Himalayan components of National Perspective for Water Resources Development. Sixteen link projects under Peninsular component and fourteen link projects under Himalayan component are identified for feasibility studies by NWDA. Many of these link projects propose to provide irrigation to the arid and semi-arid areas in the country. Thus, the link projects being studied by NWDA on implementation, will help in combating desertification of these drought areas.

(3) Regarding the prevention of desertification, what do you expect of Japan? The report of Japan can be read with the following URL.

(http://www.unccd.int/cop/reports/developed/2000/japan-eng.pdf)

It is heartening to note that Japan, as a developed nation, has been funding a no. of projects for combating desertification in developing countries. However, from the list of projects indicated in the Action Plan (of course, not exhaustive one!), it is seen that the development projects concentrated in a few countries only. I feel that the network has to spread to include other countries in Asian and African continents that deserve attention.

As regards to India, the priority areas for combating desertification are identified by the Govt. of India in its Action Plan. These are arid and semi-arid areas located in Haryana, Rajasthan, Gujarat, Karnataka, Andhra Pradesh, Maharashtra and Orissa states. These areas could be improved by providing aid to the Govt. of India's efforts (as per its action plan) or funding the voluntary organizations working on this objective in the above regions. Likewise, there may be other countries needing financial, technological and infrastructural support from developed nations like Japan.

Secondly, the Action Plan of Japan does not indicate about how the funded projects are being monitored. The Govt. of Japan may please ensure that the funds are utilized for accomplishing the target missions on sustainable basis.

5. <u>If you have other opinions or impressions based on site observation, please indicate them in the space below.</u>

- 1. The Seeds of Research bearing the Fruits on the Fields-effectively;
- 2. When the Will is Strong, Success is yours;

This spirit has been displayed by farmers in Hozo dune in preventing the damage due to sand storms and the people of Oyde in the construction of the channel.

3. Unity is Strength;

Farmers organized themselves into Land Improvement Districts and Federations to attain a better quality of life and environment.

4.Cause of Concern: Younger generations are drifting away from farming activity and there is also stiff competition from International food market. Improvement of self-sustenance in food production may be the future challenge for JAPAN.