

Setting-up of Atma Nirbhar (Self-reliance) FPOs for Marginal Farmers

We propose the setting up of Farmer Producers Organizations (FPOs) for farmers with land holdings of 0.2 to 2 ha which number about 85% of the total farmers. The objective of this process is 'Aatma Nirbhar Marginal Farmers through FPOs'. The farmers of category from 2.1 to 10 ha and above 10 ha should be dealt with separately. Otherwise, the medium and bigger farmers would dominate the marginal and small farmers and would not allow them to be Atma Nirbhar.

This would benefit about 15 crore families involving a population of about 75 crores, against a total population of about 160 crores in 2050. This work has been more or less approved by the government and money provided in 2022-23 but no action on policy issues of Atma Nirbhar FPO formation and operation along with proper training arrangements has been started.

- a. About 1-2 lakh ha of canal irrigated area has been fitted with minor irrigation system to save water in Telangana, Madhya Pradesh and Odisha. This area should be allotted to each of the 25 farmer families enjoined to form the workable area of 20-25 ha with the formation of FPOs.
- b. Some bigger farmers in Uttarakhand have also decided to give their land to the farmers who have lost it during flood or other damages should also be encouraged to form FPOs.

In urban areas the service-providing families can be brought together based on a model similar to FPOs. These services, namely (a) health services (b) construction services (c) domestic services (d) transport and tourism sector (e) education services should be considered in the context of specific projects or a specific geographical area (such as a zone within the city) within which the specific service is to be provided. For these services, the relevant government department or agency can work on the model and the details through which the service providing families with regard to a specific service can be brought together. In urban areas the underlying resource to be shared by these 20-25 families will be the residential unit for these families. The basic unit being 20-25 families staying together, managing and working together. In this process housing for these 25 families should be provided by the supervising or coordinating agency. In the case of projects, after the completion of the project the residential unit for the families can be sold to the skilled workers who may continue to live there. This would also help the urban areas by avoiding the creation of slums.

Action Plan for FPOs

FPOs offer one of the most promising approaches to improve the lot of marginal (0.002-1ha) and small farmers (1-2ha). This gives a status and respect to the marginal and small farmers

who form the FPOs with 25-30 farmer families who own adjoining land for sharing with a pooled farm size of about 25-30 ha. This would cover about 15 crore farmer families requiring formation of 60 lakh FPOs (25 families per FPO). The following aspects and advantages in the working of FPOs are notable.

- The formation of FPOs gives numerous advantages to the small and marginal farmers who constitute the FPO. It gives them the status of wholesale purchaser of inputs and seller of their products digitally. Other advantages include mechanization, use of new technologies to conserve land and water, to help in developing wetlands and small ponds for various purposes. In the time saved, the FPO members can carry out suitable livestock development, produce dairy and other products, and convert waste from the harvest and the village into gas, energy and manure.
- For operation of FPOs it is necessary to ensure that only the land owners and those having a long lease of atleast 15 years are included. All the members of the families constituting the FPO between the age of 18 and 70 years would be permanent members of the society for policy decisions and management of the total land in all respects through a number of small committees. This would enable gender balance as well as involvement of all generations. The knowledge of various skills which the members may be having can be utilized for operating and managing activities. Small committees including knowledgeable persons can be set up to decide on cropping pattern suitable to the soil, climate and water availability from all sources. About three to four choices can be obtained by the FPOs for various crop combinations from the nearest agriculture university. They would consider planning, execution and monitoring of all the activities allotted to them. They will also manage through the digital system, the purchase of all inputs and selling of the produced products. The decisions would be taken on the basis of consensus from 60%-70% and not by voting of the members
- This would also enable the families to work together and also sort out problems leading to social and economic items dealt by the FPO families including looking after small children, older and helpless people and relationships between the various genders and generations. It would be desirable for each member to learn two or three skills. Two FPOs can be setup in each village so that people can actually see how to manage the whole system, including converting waste into usable products and the benefits for better life which can be achieved through this new process. All decisions would be taken by consensus and not by vote to allow freedom of speech.
- Many other farmers would be convinced to setup such FPOs after actually talking to the existing FPO farmers about the real benefits received through the work of the FPOs. Government should come out with more policy support measures and proper training. Government is already creating many other credit systems through cooperatives and other agencies. It would be wise to check that such credit facilities

are not duplicated. Suitable financial systems specially designed for FPOs which would enable better credit facilities, and for renting various equipment have to be created, rather than buying them. Rules and regulations should be prepared and introduced immediately before registering the FPOs under the existing societies.

- After sometime, two or more FPOs of 25-30 ha each could cooperate to give a good competition to the bigger farmers.
- These FPOs can be technically helped by the district professionals through the junior technicians located in each Block and socially helped by the Panchayat. The FPOs can also be advised and guided by the River Basin Organisation (RBO) (see box on RBOs below).

RIVER BASIN ORGANISATION (RBO)

A tribunal system is setup by the Ministry of Water for distribution of water of a river system to concerned states through which it passes has been in operation for the past 20-30 years on a combination of judicial and professional factors but has not been working satisfactorily in most of them at present. Since each state wanted to advocate for a higher share of water than was normally available the collection/reporting of data was manipulated.

In order to avoid such a situation, it is necessary that the River Basin Organizations (RBOs) for each river system is setup and headed by the Chief Ministers of the state by rotation for avoiding manipulation of data and its implementation. The Center should act only as a representative to observe that India's interest in connection with foreign countries are taken care of and advice accordingly. For bigger rivers like Ganga, Yamuna etc. a number of branches join them independently and as such sub units of the RBOs can be setup to expedite the decisions. The details are available in the book by G N Kathpalia and Rakesh Kapoor: [*Charting a New Course: A Strategy for Sustainable Management of India's Water Resources in the 21st Century*](#) [the book can be downloaded from this link].

The various functions of the proposed RBOs are the following:

1. Collection of data on water from various sources and land use for various purposes.
2. Planning and designing for improved efficiency through various technologies.
3. Agreement between various states on the river to be prepared and approved for total use of water and land.
4. Production of various kinds to be forwarded to the Jal Shakti Ministry and WGSRP for bringing about the balance between states for efficient and cheaper production of those items in suitable states.
5. The normal use of land and water will be carried out by the present departments through monitoring, modification and maintenance and construction of new structures and items as suggested by RBO. Separate sections should be created for the each type of work indicated.
6. Junior technical staff of these departments particularly for rural areas will be located in each Block/Panchayat for teaching new technologies and monitoring on a regular basis working under the District Officer of their department. The Jila Parisad and Panchayat will look after the progress of changes with regard to public participation in social aspects and new innovations.
7. The RBOs will be headed by the Chief Ministers of the concerned states but the chairmanship would be rotated for the period decided by them.
8. Subsidies of various kind should be given to marginal farmers till a couple of years till the start early their profits. The subsidies to the larger farmers and middle level farmers should be stopped.

The Ministry of Jal Shakti has already been formed and working. The following coordinating structure would help the Jal Shakti Ministry functioning better and should be setup at the earliest. Please see the chart below.

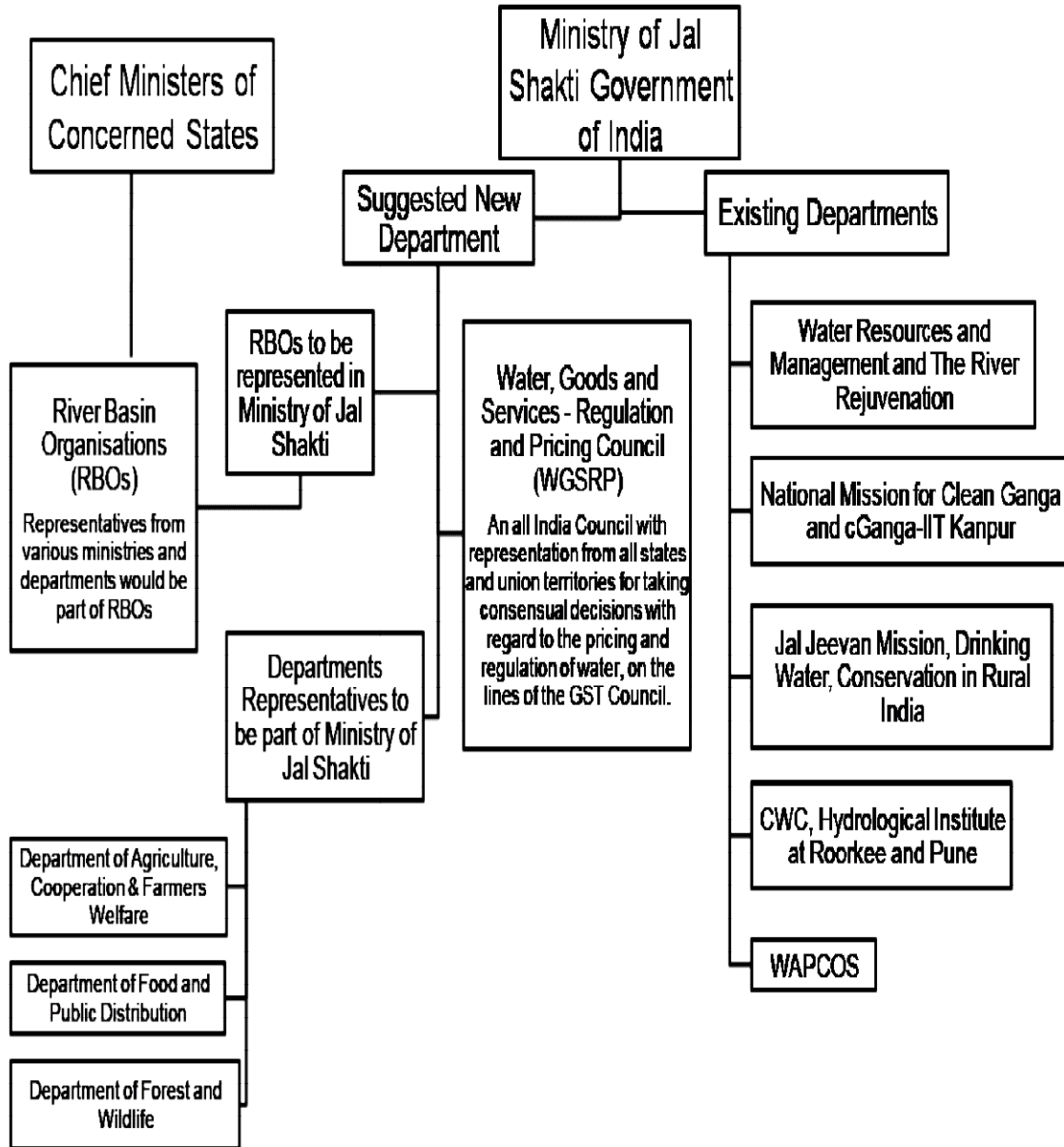
FPO (Farmer Producer Organization) – District Level Professionals from each department – RBO (River Basin Organization) – WGSRPC (Water, Goods and Services – Regulation and Pricing Council) – Jal Shakti

Formation of FPOs is very essential as the base to start the Atma Nirbhar process. In between it is necessary to add other specific organisations like the proposed Water, Goods and Services – Regulation and Pricing Council (WGSRPC)(see Box on WGSRPC below) and RBOs with incentives for setting them up. Representatives of other departments which are using water for agriculture, forest, urbanisation, health and transport have to be included in the proposed coordinating structure of the Ministry of Jal Shakti. NABARD and other service providers have also been included for data collection and consideration of policy matters. Conversion of waste of all types to useful products is very essential for reuse of land, water and time for other purposes. This would require a circular economy along with suitable policies for each use of water compatible to various uses.

Water, Goods and Services - Regulation and Pricing Council (WGSRPC)

We propose a Water, Goods and Services - Regulation and Pricing Council (WGSRPC) on the lines of the GST Council. This all-India body will have representation from all states and union territories for taking consensual decisions with regard to the pricing and regulation of water, on the lines of the GST Council. This would enable uniform input cost for various uses of water and selling of water-products through digital platforms, thus enabling competition and ensuring the efficient use of water in all respects. Implementing such a programme, especially for marginal and small farmers would require formation of FPOs/farmers' groups.

Figure 1: Ministry of JAL SHAKTI: Departments and Linkages with other Government Departments



Box: Experience of G N Kathpalia on Nongwai Irrigation Project, Thailand

In December 1980, the ADB approved the construction and planning of irrigation system of 10,000 Ha in the Nongwai region of North-eastern Thailand through a Japanese firm. However, several context specific issues were encountered by the people involved. The construction and planning group did not take into account how an equitable distribution of water would be achieved in the operation of the canal system. The local irrigation department was following an American system for the past 20 years on other projects which did not fit in the new project. This was because the earlier system distributed water on a single owner land area by rotation basis. The contractor, in order to save money, built minor channels of same size and even ordered pipes of the same size, despite the land holdings being of different sizes. To resolve this issue, the distribution of water had to be planned not for each individual farmer but for a group of farmers. There were about 15-20 farmers on each minor channel who would all get water at the same time for a certain period.

The Warabandi (rotation system) known in India, was arranged not on the basis of individuals but on the basis of a group located on that particular minor channel. The rotation period would be kept as one week for paddy and vegetables. The pipes to each individual farmer were adjusted by fixing a collar of size proportionate to their land holding. This system removed the uncertainty of timing and quantity of water, since water was given free by law. If there was excess water going into the drain, it was reduced at the head of the smaller channel. Since the canal was coming from a hydel-power reservoir the extra water could be stored there. This way, cheating and corruption could be avoided between the farmer and the operations staff. The farmers were happy to have sufficient water and added socio-economic benefits by way of free time during which they could take up some other work for more earnings. This was first implemented in a 1,000 Ha area in the 1982 Rabi season. The irrigated area jumped from 20% to 67% in this season against the project objective of 80%.

A manual in Thai language was prepared as to how this could be carried out with small modifications in the rest of the 9,000 Ha over the next five years. Since the farmers had seen and heard from other farmers about the benefits they could get, the target was achieved in time. This intervention was very much appreciated by the ADB and the World Bank.

A person from Thailand Management Institute was attending a seminar in Delhi in early 21st century, informed me that the system have been implement in the most part of the irrigated area in 25 years.

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I did my Civil Engineering, Graduation and Masters from Roorkee University (now IITR). I have 70 years' experience in dealing with land, water, agriculture, community participation and

river management at the UP state government (14yrs), central government (planning commission, National Commission on Agriculture, Agriculture Ministry (CAD & GW), Water Resources Ministry - 18yrs) and as consultant (18yrs) to international organisations like ADB (Thailand – operation of canal system), World Bank, US-AID (implementation of WALMI project, Ford Foundation (community participation) etc. Advisor to IIT Consortium for the project National Ganga River Basin Management Plan (NGRBMP) (5yrs). Chairperson of Alternative Futures (15yrs continues). At present completing a book on guidelines for use of Water, Land and Forest keeping the environment development in view up to 2050.