7<sup>th</sup> National Symposium Dates: 2-3 March 2010

Place: Acharya N.G. Ranga Agricultural University (ANGRAU), Hyderabad

Theme: Operationalization of National Policy for Farmers, 2007

#### The Context

Low agricultural productivity, declining rate of growth of total factor productivity, stagnating and low farmers' income despite the increase in agricultural produce prices, technology fatigue, glaring technology transfer gaps, extension failures, huge post harvest losses, declining net agricultural trade intensity, stubbornly high hunger and poverty, worsening cost-risk-return structure of farming and rising farmers' indebtedness dot the agrarian landscape.

Stemming from the National Commission on Farmers' (NCF's) draft National Policy for Farmers, for the fist time in the history of Indian agriculture, the Ministry of Agriculture brought out the National Policy for Farmers (NPF), September 2007. Major goals of the Policy, as annexed, are geared to meet the above challenges. The Agricultural Universities (AUs), both at state and national levels, shall play significant role in operationalizing the National Policy for Farmers.

The term "farmer" should be taken to mean the same as originally suggested by the National Commission on Farmers (NCF) and adopted in the NPF document. It refers to both men and women, and includes landless agricultural labourers, sharecroppers, tenants, small marginal and sub-marginal cultivators, farmers with larger holdings, fishers, livestock and poultry rearers, pastoralists, small plantation farmers, as well as rural and tribal families engaged in a wide variety of farming related occupations such as apiculture, sericulture and vermiculture.

Several of the recent initiatives of the Government of India, such as the National Horticulture Mission, the National Rainfed Area Authority, National Food Security Mission, Rashtriya Krishi Vikas Yojana, etc. launched for increasing agricultural production and productivity are in consonance with the intent, direction and measures suggested in the National Policy for Farmers. As the Union Budget is not just a mere statement of accounts but also a reflection of the government policy and direction, the following initiatives included in the 2010-11 budget are also relevant for operationalization of the NPF by the SAUs.

- 1. Extending the green revolution to the eastern region of the country comprising Bihar, Chattisgarh, Jharkhand, Eastern UP, West Bengal and Orissa.
- 2. Organising 60,000 "pulses and oil seed villages" in rain-fed areas during 2010-11 and providing an integrated intervention for water harvesting, watershed management and soil health to enhance the productivity of the dry land farming areas.
- 3. Sustaining the gains already made in the green revolution areas through conservation farming, which involves concurrent attention to soil health, water conservation and preservation of biodiversity.

4.	Operationalising a nutrient-based subsidy policy for fertilizer sector, which will lead to an increase in agricultural productivity and better returns for the farmers, and overtime reduce the volatility in demand for fertilizer subsidy and contain the subsidy bill.
5.	Addressing the issue of opening up of retail trade to help in bringing down the considerable difference between farmgate, wholesale and retail prices and augmenting the storage capacity.
6.	Setting up five more mega food parks in addition to the ten mega food parks projects already being set up.
7.	Making available external commercial borrowings for cold storage or cold room facility, including for farm level pre-cooling, for preservation or storage of agricultural and allied produce, marine products and meat.
8.	Establishing National Clean Energy Fund for funding research and innovative projects in clean energy technologies.
9.	Providing additional central assistance for drought mitigation in the Bundelkhand region.
10	Meeting the specific needs of women farmers through the Mahila Kisan. Sashaktikaran Pariyojana as a sub-component of the National Rural Livelihood Mission.
Government's emphasis on credit support to farmer, National Ganga River Basin Authority, enhanced spending on social sector, development of rural infrastructure, enhanced allocation for Mahatma Gandhi National Rural Employment Guarantee and to	

Bharat Nirman is also appreciated as these will facilitate universities' effort towards

# Recommendations

implementation of the NPF.

# 1. Extension

The State Agricultural Universities (SAUs) and the Deemed Agricultural Universities (DAUs), generally by-passed by concerned government departments, play only a peripheral role in planning, priority setting, and programme development and implementation for agricultural and rural transformation, especially at district and imcro levels. On the other hand, it was noted that the ANGRAU is successfully playing a lead role in integrating the various planning and implementation activities related to extension and technology transfer at district level in Andhra Pradesh by establishing District Agricultural Technology Centres in close cooperation of and consultation with concerned stakeholders, especially the district authorities, agricultural development department and Panchayat Raj Institutions (PRIs).

The ANGRAU experience should be critically documented and all states should adapt and implement it as per their needs and capacities to ensure their involvement in the grassroots planning and implementation processes. The Vice Chancellor of ANGRAU may coordinate and monitor this activity through IAUA. A small committee may be established to prepare a framework and set of guidelines for establishing the proposed district-level institution under the control of concerned SAU within the next six months with due consideration of ongoing programmes, existing institutions and funding arrangements.

In particular, Sarpanch Melas should be regularly organized by SAUs for information sharing, awareness raising, feedback and promoting role of the grassroots institutions in operationalization of the NPFs. Wherever feasible, help may also be sought of religious preachers/leaders in raising the awareness and disseminating new agricultural knowledge and technologies.

## 2. Technology Transfer

Appreciating the differentiated approach of the Government for providing additional funds to enhance income, food, nutritional and livelihood securities through extending and consolidating the Green Revolution to the eastern region and by organizing thousands of pulses and oilseeds villages in rainfed areas, the corresponding SAUs should lead these initiatives by generating and transferring appropriate technologies for enhancing productivity in the resource-poor areas. The concerned universities in Uttar Pradesh and Madhya Pradesh should be supported to develop drought mitigation and adaptation strategies in the Bundelkhand region.

While efforts should be intensified for reviving the agricultural crescent of eastern India, the heartland of the Green Revolution (Punjab, Haryana and Western U.P.), which has been contributing the bulk of the national food buffer stocks, should not be neglected and appropriate strategies and technologies should be developed by the Agricultural Universities in these areas for maintaining and further expanding the gains already made, particularly through promoting conservation agriculture.

Based on the successful adoption of the Model Farmer concept by some of the SAUs, it was recommended that all states should adopt this approach for speedy and effective transfer of technologies.

# 3. Input Use

The emphasis on nutrient-based fertilizer pricing and subsidy regimes to enhance balanced usage of fertilizers is a step in the right direction. Adequate budget should be allocated by the Union Government and part of it should be diverted to AUs for enriching the related extension services, knowledge base and software components to enhance nutrient use-efficiency. SAUs should develop clear cut and simple guidelines and make

them widely known for implementing the nutrient-based fertilizer pricing and subsidy policy.

The SAUs through the District Agricultural Technology Centres should lead revitalization and strengthening of soil testing capabilities in each district and foster collaborative effort of Departments of Agriculture and other related departments and concerned agencies. The ICAR should strengthen the KVKs to be the focal soil testing service centres. The facilities, equipment and human resources currently available for soil testing in Government departments should be transferred to SAUs. The ICAR should provide the needed additional fund and manpower for the purpose.

The Agricultural Universities with strong support from ICAR have been the main source of supplying nucleus, breeder and foundation seeds. However, the seed replacement rate for all major crops has been far below the desired level, especially in case of pulses and oilseeds, including soybean and groundnut. The universities should analyze the situation region-wise and commodity-wise and in collaboration with concerned government and private sector agencies should lead the national movement of assuring timely and adequate flow of quality seed from breeders' plots to farmers' fields. This role of the universities will provide healthy competition to the private sector and help moderate seed prices.

#### 4. Post-Harvest Management and Value Addition

The AUs should, on priority basis, strengthen and streamline their research, education and extension programmes on prevention of post-harvest losses and value addition for enhancing productivity, access to markets and net income of farmers and other along the production-consumption chain. All AUs should have incubation centres and windows of entrepreneurial development and should restructure and rename their KVKs as Krishi Vigyan and Udyog Kendras and benefit from the initiatives on food parks and cold chain development. Short-term trainings and diploma courses on post-harvest technologies and market linkage should be institutionalized for income, environmental and employment securities.

#### 5. Management of Assets and Climate Change

The urgency of ensuring resilience against climate change-induced vulnerability and the need for developing adaptation and mitigation strategies can hardly be overemphasized. Integrated farming system should become pivotal to the sustainable management of the natural and other resources and an economic stake should be created in conservation of resources. Interdisciplinary research for developing location specific farming systems and promoting conservation agriculture for concurrently improving and conserving soil, water, biodiversity and other resources should be undertaken by all SAUs.

All SAUs should assess the status of land/soil, water, agro-biodiversity, livestock, fisheries, agroforestry and other resources (as described in NCF reports) of their states/areas of jurisdiction, identify available technologies awaiting transfer, effect transfer of the proven technologies through the proposed district agricultural technology centres in partnership with the state departments, farmers' organizations and other stakeholders, and undertake research on priority areas to bridge the knowledge and information gaps. Dr. V.M. Mayande, Vice Chancellor, PDKV, Akola, will constitute and chair a National Committee on this subject which shall prepare a nation-wide programme on assets management with clearly defined outcomes, monitoring and timeframe. The IAUA will provide the secretariat support.

#### **6. Agricultural Research for Development**

For judicious and effective implementation of the NPF, the AUs should streamline their socio-economic studies and researches with the farmers in focus, including the following aspects:

- Biorisk assessment and management to develop reliable biosecure measures towards harnessing biotechnology and other cutting-edge technologies.
- Implementation of land reforms, prospects of contract farming, diversion of food land to fuel farming,
- Food prices, agricultural prices, input prices, net income level of farmers, level of MSPs and MSP coverage, farmgate price and retail price, minimizing price slippage, management of market volatility, insulating the poor from the uncertainties, and translating price incentives into increased net income and welfare of farmers.
- Standardization of the methodology for identification of the poor and hungry and quantifying the depth of hunger and poverty,
- Enhancing the role of the private sector in augmenting agricultural research, education and extension for development, particularly for welfare of the farmer
- Prospects of agricultural diversification at small farms
- Carbon budgeting, trading and dispensation of carbon credits

#### 7. Human Resource Development

Diploma courses in farming system should be institutionalized by the SAUs, particularly for extension and Panchayat personnels and other development agents involved in technology assessment and transfer with emphasis on conservation agriculture, climate change management and market-led extension. Need-based certificate courses on IPM, INM, seed production etc. should be introduced in all SAUs. Preference for enrollment for such courses should be given to school and college drop-outs as well as to literate progressive farmers, including those chosen for organizing farmers' field schools.

Each SAU should restructure its curricula for enabling every farm and home science graduate to become an entrepreneur and to make agricultural education gender sensitive. Private companies manufacturing and distributing agricultural inputs and related products should, other things being equal, give preference to agricultural graduates for employment and granting licenses and dealerships.

The University courses and the learning processes should be rendered intellectually stimulating and economically rewarding. The currently available staff at SAUs is, however, not adequately equipped to impart training in several of the new areas and for implementing proposed new curricula. Ministry of Agriculture, ICAR, Ministry of Human Resources and UGC should provide financial support to SAUs for retraining and retooling the university staff to upgrade their overall skills to meet the new demands. Agriculture should be introduced as a core subject at the Primary School level to attract and retain the youth in agriculture.

### 8. Information and Communication Technology for Development

Agricultural universities are ideally disposed to the documentation, validation and refinement of traditional knowledge in agriculture and should serve as a knowledge hub for indigenous technologies. The SAUs should assist local farmers and communities in getting their varieties, breeds, technologies and knowledge registered with concerned national authorities.

## 9. Institutions

Pursuing the initiative of the Comprehensive District Agricultural Plan (CDAP), Panchayat Raj Institutions should be empowered to be effectively involved in the grassroots planning and implementation with transparent accountability, responsibility and authority, particularly in the management of agricultural assets. SAUs should help in strengthening the PRIs primarily through training and augmenting their information and communication capacities. A strong and synergistic partnership between SAUs and PRIs is essential for effective technology transfer, extension, training, and community and women participation.

#### 10. Empowerment of Women Farmers

The launching of the Mahila Kisan Sashaktikaran Pariyojana to meet the specific needs of women farmers is a step towards promoting inclusiveness and mainstreaming of the human and gender dimensions in farm policies and programmes. Toward this cause, special and specific training programme for women should be planned by SAUs. Panchayat Raj Institutions should be requested to nominate women participants for the training programmes.

#### 11. Governance

On behalf of the SAUs, the IAUA should approach and follow-up with all state governments to duly include agricultural universities in their state, district and local level agricultural development planning and the universities should be assigned lead role in planning and implementation of agricultural research, education, extension and technology transfer for development programmes.

The Acts And Statutes of the SAUs are at great variance and often outdated and outmoded. The IAUA should prepare a Model Act for agricultural universities and have it approved by all concerned and assist and monitor its adoption and implementation by individual universities as per the local specifications with the foremost aim of serving the farmers and improving agrarian livelihoods.

Each SAU should constitute its own standing committee chaired by the VC for monitoring and guiding operationalization of the NPF.

The SAUs are starved of funds. State governments should particularly ensure adequate and separate budget line for SAUs. A part of the Mandi Samiti's receipts, about 1.5 to 2 percent, should go to the SAUs. While the universities should be encouraged to generate part of their funds, it should never be at the cost of their primary functions and roles (quality education, research and extension).

**ANNEX** 

# **Major Goals of the National Policy for Farmers**

- i. To improve economic viability of farming by substantially increasing the net income of farmers and to ensure that agricultural progress is measured by advances mode in this income.
- ii. To protect and improve land, water, bio-diversity and genetic resources essential for sustained increase in the productivity, profitability and stability of major farming systems by creating an economic stake in conservation.
- iii. To develop support services including provision for seeds, irrigation, power, machinery and implements, fertilizers and credit at affordable prices in adequate quantity for farmers.
- iv. To strengthen the bio-security of crops, farm animals, fish and forest trees for safeguarding the livelihood and income security of farmer families and the health and trade security of the nation.
- V. To provide appropriate price and trade policy mechanisms to enhance farmers' income.
- vi. To provide for suitable risk management measures for adequate and timely compensation to farmers.
- vii. To complete the unfinished agenda in land reforms and to initiate comprehensive asset and aquarian reforms.
- viii. To mainstream the human and gender dimension in all farm policies and programmes.
  - ix. To pay explicit attention to sustainable rural livelihoods.
  - X. To foster community-centered food, water and energy security systems in rural India and to ensure nutrition security at the level of every child, woman and man.
  - xi. To introduce measures which can help attract and retain youths in farming and processing of farm products for higher value addition by making it intellectually stimulating and economically rewarding.
- xii. To make India a global outsourcing hub in the production and supply of inputs needed for sustainable agriculture products and processes developed through biotechnology and Information and Communication Technology (ICT).
- xiii. To restructure the agricultural curriculum and pedagogic methodologies for enabling every farm and home science graduate to become an entrepreneur and to make agricultural education gender sensitive.
- xiv. To develop and introduce a social security system for farmers.
- XV. To provide appropriate opportunities in adequate measure for non-farm employment for the farm households.