

# India Prime Minister's Vision to Double Farmer Incomes By 2022

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By
Ramesh Deshpande
India Agricultural Group
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#### **PART I**

#### INDIA AGRICULTURE TODAY

#### **India Agriculture Today**

- With 1.2 billion, India is now the World's fourth largest economy a significant achievement of our time. In particular, India has witnessed a landmark revolution in agriculture transforming the nation from its chronic dependence on grain imports during fifties and sixties, to a net exporter of food, especially certain types of grains.
- During the past over five decades, with the adoption of green revolution technology, India's food production increased 3.7 times while the population increased by 2.55 times. The net result was 45% increase in per person food production.
- Agricultural growth in India in turn led to an impressive progress in human development indices, particularly with life expectancy doubled, literacy rate quadrupled, health conditions notably improved and rural poverty rates significantly declined. Malnutrition especially among the rural poor including children remains a matter of concern.

#### India Agriculture: Yes, We Know the Problems!

- Despite major transformation from dependence on food aid to becoming a consistent net food exporter, India's agriculture has underperformed relative to its potential. Maintaining India's hard-won food security and achieving shared food prosperity is still a challenge. On the one hand, there exists widespread under nourishment and other hand, record production levels of food and overflowing stocks.
- Green revolution technologies which result in deterioration of soil and water quality and environmental hazards need to be modified to promote sustainable agriculture based NRM technologies.
- Across India, diversification of higher value crops and livestock products has proceeded too slowly – which has adversely affected overall growth in agriculture; and the Lack of value addition and supply of high value products has not kept pace with growing demand generated by increasing incomes in urban sector;

#### INDIA AGRICULTURE: CONSTRAINTS TO GROWTH

Slow growth in agriculture relative to the overall growth can be attributed to number of factors including the following:

- Slow generation of new technologies after the stabilization of green revolution technologies.
- Poor dissemination of existing technologies;
- Weak and inefficient institutions serving agriculture (covering Agricultural Reseach, Education, Extension, Credit and Marketing);
- Poor governance or management of the sector at macro and micro levels;
- Budgetary constraints and low private sector investments; and above all
- Rainfall shocks that affect production and productivity.

While a lot of work is underway, if farmer incomes must double by 2022, these constraints must be systematically addressed.

## India Agriculture Agriculture Growing Too Slowly Relative to Other Sectors (source: The World Bank)

Sectoral trend growth rates by period (%/yr) Sector	1960/61– 1968/69 (Pre green revolution)	1968/69– 1975/76 (Early green revolution)	1975/76– 1988/89 (Wider Technology Disseminat ion)	1988/89– 1995/96 (Period of Diversificat ion)	1995/96- 2004/05 (Post reform period)	2004/05- 2010/11 ( Period of recovery)	2011/12 - 2015/17 (Period of stress due to droughts
Agric. and Allied Activities	1.03	1.98	2.42	3.24	2.35	3.31	1.6
Agriculture*	0.70	1.93	2.71	3.21	2.30	3.37	
Crops (VOP) Livestock (VOP)	1.11 0.40	1.90 2.69	2.56 4.89	2.64 4.12	1.88 3.43	3.01 4.29	
Forestry and Logging	3.70	2.01	-1.77	0.74	2.05	2.25	
Fishery	3.91	4.19	3.45	7.37	3.28	4.42	
Nonagricultu ral	4.90	3.67	5.23	5.91	7.05	9.68	
All sectors	3.19	2.99	4.25	5.14	5.95	8.57	6.25

## India Agriculture Sectoral Growth Trends by periods -II

Agricultural Output and Productivity in India witnessed large annual fluctuations Over the past six decades, with average growth rate being just under 3%.

- During 1960s and 70s, decisive push for green revolution through introduction of hybrids, use of chemical fertilizers and pesticides, and farm mechanization resulted in notable increases in cereal production.
- 1980s witnessed a sustained growth in agriculture as the green revolution technology spread to other parts of the country – beyond Punjab and Haryana. Early 1990s saw diversification in agriculture with growth rates reaching 3.5%.
- However, there was a prolonged slowdown in agriculture during 1996-97 through 2004-05. Agricultural growth remained positive since then but slowed down progressively to 2% in 2011.
- Since 2011-12 to 2016-17, agriculture grew at an average rate of about 1.6%, with as low at about 1% during 2012-13 &2015-16, and negative during 2014-15 at -0.2%, which was due to wide spread drought conditions.
- During 2016-17, due to good monsoons, agricultural growth is estimated at about 4.1%. The sector has turned around but challenges remain.

## NDA GOVT'S RECENT INITIATIVES TO ADDRESS RISKS & CONSTRAINTS TO GROWTH IN AGRICULTURE

Since 2014, GOI has launched several new programs and modified the old ones over the past three years including the following:

- PM's Fasal Bima Yojana;
- Pradhan Mantri Krishi Sinchai Yojana;
- Soil Health Card issue and improved soil nutrient management,
- Paramparagat Krishi Vikas Yojana;
- eNAM
- JLG Financing;
- Neem Urea; and
- Mobile Aps for Farmer,

However, more needs to be done if agricultural growth must accelerate and help increase farmer incomes. Agriculture faces many risks and requires subsidies and disaster relief causing much burden on already stretched fiscal resources. GOI and state governments are therefoe expected to do continuous monitoring of the above programs from local to national levels and correct any gaps to ensure implementation that is well funded, inclusive and efficient.

## HON. PRIME MINISTER'S VISION TO DOUBLE FARMER INCOMES BY 2022: NITI Aayog's Approach

Hon. Prime Minister's Vision to Double Farmer Incomes by 2022 can potentially lay the foundation for accelerated restructuring, revitalization and transformation of India's Agriculture and its sustained growth leading to increased incomes to farmers. NITI Aayog's Governing Council, has accordingy endorsed in April 2017, a Three Year Action Agenda (2017-18 to 2019-20) that focuses primarily on Economic Transformation of major sectors including Agriculture. In Agriculture, the economic transformation is proposed to be accomplished through following for key initiatives.

- Reform Agricultural Market Policies and Market Interventions including MSP procurement, to ensure that farmers receive remunerative prices;
- Improve productivity of both land and water, which remains low for many crops when compared to other countries – also there are regional variations in productivity that must be addressed;
- Accelerate land reform Amend old tenancy laws; introduce land leasing (and contract farming?); enable farmers to lease or sell their lands or borrow loans against land;
- Improve relief measure in the event of natural disasters.

## HON. PRIME MINISTER'S VISION TO DOUBLE FARMER INCOMES BY 2022: Inter Ministrial Committee's Approach

Besides NITI Aayog's three year Action Agenda, the GOI appointed 8-member Interministerial Committee under the chairmanship of Additional Secretary of Agriculture, Shri Ashok Dalwai, has been working on the preparation of a blue print for doubling farm incomes by 2022. This Committee is expected to:

- Prepare a Plan to shift policies to income-based from currently production oriented;
- Suggest ways to reduce risk of farming by diversifying horticulture and allied activities like livestock and fisheries to boost income and
- Suggest measures for reducing the cost of cultivation and addressing unpredictability of weather and price fluctuation.

Applying three (3) variables, namely, productivity gains, reduction in cost of cultivation and remunerative price, the Committee has developed a strategy platform that the Interministrial Committee is building its blue print is addressing the following four concerns:

Sustainability of production;

Monetization of farmers' produce;

Re-strengthening of extension services; and

Recognizing agriculture as an enterprise and enabling it to operate as such, by addressing various structural weaknesses

## GOI'S NEW POLICY INITIATIVES FOCUS ON RISK MANAGEMENT IN AGRICULTURE

- Per Drop More Crop, More efficient use of water, water conservation and micro irrigation;
- Efficient supply and use of three critical inputs: seeds, fertilizers and pesticides; Use of new Technologies: GM and other modern technologies; R&D in Agriculture;
- Shift into High Value Commodities;
- Increase share of Animal Husbandry in value addition already constitutes over 35% of GDP;
- Bring Green Revolution to Eastern States;
- Ensure Remunerative Prices to Farmers through MSP;
   Concern about farmers in states where no procurement with MSPs. Ensuring a higher price for farmers relative to prices paid by Consumers.

#### **MANAGING RISKS IN AGRICULTUR (Contd.)**

Basically, the country's effort should be to improve resilience of Agriculture to the likelihood of cyclical and random rainfall shocks through:

- Improved management and efficient use of water resources, while promoting investments in sustainable irrigation to weather-proof agriculture.
- Promoting public and private investment, as well as greater openness to introducing suitable technologies to mitigate and potentially adapt to climate variability.
- Improving markets and marketing to allow real-time risk sharing across states and districts in response to clear market signals.
- Diversifying and stabilizing sources of income (outside the crop sector), both onfarm (through livestock) and off-farm (through productive nonfarm employment), and
- Improving the effectiveness of safety net programs such as the Public Distribution System.

## Adapt Prevailing Policy Instruments To Ensure Farmer Incomes Are Not Adversely Affected!

- Currently, trade policies are used, by and large, to insulate domestic prices –
  mainly for the benefit of consumers; this should not be done at the cost of
  prices or incomes received by farmers;
- Minimum Support Prices (MSPs) are set to ensure reasonable returns to farmers (incentive to produce food), and reasonable prices to consumers. However, not all commodities are covered by MSP and not all states covered by procurement at MSP. Farmers face uncertainties in output prices received;
- MSP is defended by public procurement and stock piling (reserves) and discretionary disposal of stocks on hand to stabilize prices – all this should be so balanced as not to affect farmer incomes adversely.
- Food Availability particularly grains and pulses is ensured by supporting domestic production supplemented by imports. Care should be taken that farmer interests are not affected.
- While access to food to low income groups is important, it needs to be: targeted, quantity-constrained, released only to low income groups through fair price shops and that too against pre-defined quotas! This PDS should not result in depressing prices received by farmers.

#### INDIA AGRICULTURE: FARMER INCOMES LAGGING

- After 1993-94, relative income of farmers worsened and reached one fourth of income of non-agricultural workers.
- There was some increase during 2004-05 to 2011-12 but no improvement over 1983-84 level. The recent four years again witnessed deterioration in relative income of farmers.
- The ratio of income per non-agricultural worker in 1983-84 was 2.98, it remained between 3.05 to 3.35 during 1987 to 1999, increased to 4.08 in 2005-08, declined to 3.50 in 2009-10 and has remained around 3 during the remaining period.
- Overall, 22% of total farm households in India are below the poverty line.
- By state, Punjab, Kerala and Haryana have the least number of farm households below the poverty line (less than 5%);
- MP, Bihar and Odisha have 25-35% farm households below the poverty line.
- Jharkhand has the highest number of farm households, over 45% below the poverty.
- There is considerable disparity in incidence of poverty across states and therefore we need diverse strategies in place to promote farmer incomes.

#### **Farmer Income Lagging (Contd)**

- Hon Prime Minister's vision envisages that farmer incomes be doubled by 2022.
   Past agricultural strategies have focused primarily on raising agricultural output and improving food security (see, Dr Ramesh Chand, Director NITI Aayog, Presidential Address to ISAE Annual Conference at Johrat, Assam).
- As explained earlier, this strategy involved extension of input intensive green revolution technology, incentive structure in the form of remunerative prices (MSPs) for some crops and subsidies on farm outputs; public investments, especially in irrigation; and institutional support for agricultural education, research, and extension. This strategy paid dividends making India self-sufficient in food at the aggregate level as well a net food exporter (except pulses in recent years which required to be imported in large quantities to fill supply gaps and create buffer stocks.
- This strategy did not explicitly consider raising farmer incomes, which have remained significantly low relative to those working in non-agricultural sectors. In 1980, average farmer income was only 34 per cent of the income of a non-farm labor. The level of disparity remained unchanged in the following decade.

#### MEASURING FARMER INCOMES: METHODOLOGICAL ISSUES

- The issues concerning methodology and the base-line to be used for measuring farmer incomes, are still under discussion (see, Dr. Ramesh Chand's Presidential Address to ISAE Annual Conference at Jorhat). The key issues are as follows:
  - (a) what is the targeted year for doubling farm income;
  - (b) what is to be doubled –is it output; value added; or income earned from agricultural activities;
  - (c) whether nominal income is to be doubled or real income is to be doubled; and
  - (d) whether the targeted income includes only income derived from agricultural activities or would it also include income from farmers' other income.
- It is expected that the NITI Aayog of which Hon. Prime Minister is the Chairman will, in conjunction with NSSO, will advise the country on this.
- At this point, no effort should be deferred to accelerate the restructuring and revitalizing the country's agriculture and in turn increase farmer incomes.

# PART II INDIA AGRICULTURE TOPICS FOR URGENT POLICY & PROGRAM ACTIONS (Based On IAG's Recent Field Work)

#### INDIA'S SYSTEMIC CHALLENGES

"Historically, India has had a mixed record of political commitment to agriculture, and its implementation record is also mixed.

India's challenge is to generate the necessary political commitment and develop administrative capacity over its vast agricultural lands, at multiple levels ranging from farm households, panchayats, districts, and states, to establish strong, pluralistic institutions and a functioning physical infrastructure.

These institutions need the necessary skill mix and incentives to build a transformational, scientific approach to agriculture, make governance of agriculture accountable to farming communities, and deliver more and better results more uniformly across states.

This will call for a broadly consultative, participatory "adaptive management" style to the policymaking process, with an emphasis on implementation, routine monitoring, and evaluation of the results to learn by doing and make results-based improvements.

Environmental transitions, such as rising temperatures, more frequent droughts and floods, growing water scarcities, increased incidence of pests and diseases, and land degradation require an adaptive approach with skill mixes in the public, private, and civil society to deal with them".

Source: From a recent speech at the XIII Agricultural Science Congress in Bengaluru (February 2017), Dr Uma Lele (Former World Bank Senior Adviser & Independent Researcher.

## Main Causes of Weak Implementation: Lack of Coordination & Convergence

- Policy Reforms and Programs suffer from weak Implementation; Programs are often inadequately funded; where funds are available, these are not effectively spent; Shortfalls in targets reduce growth and along with it resource availability;
- Development programs are functionally devolved on Panchayati Raj Institutions (PRIs) or urban local bodies but generally, in most states, funds earmarked for development programs do not get devolved to PRIs or urban local bodies. Implementation problems are more severe in the case of policy reforms due to lack of understanding of the rationale underlying these reforms;
- District level planning and budgeting do not necessarily reflect local agricultural, environmental, and NRM sustainability strategies, except for a few projects involving state and central government subsidies. Much of the agriculture departments' time at the district level seems to go for subsidy disbursement. Extension suffers from the lack of staff and/or funds and locally suited technology packages;
- District Collectors are overburdened with administrative work and are unable to devote needed time and dedication to innovative development agendas. Zilla Panchayat Chief Officers are equally unable to attend to district-level priorities and development agenda;
- At the state level, development programs suffer from lack of inter-departmental or inter-agency coordination and convergence. Hon. Prime Minister's agenda will not get efficiently and effectively implemented if these issues are not seriously addressed, jointly and severally, by the central and state governments.

## SUGGESTED POLICY & PROGRAM ACTIONS Ten Priority Areas

Based on IAG's recent field work in selected states, we have identified ten key areas for specific actions as follows.

- Establish Krishi Cabinets at the National & State Levels;
- Prepare Time-bound Action Plans for implementing policy and proram reforms in support of Doubling Farm Income by 2022. Prioritize various recommendations for actions at national to village levels. Make state governments accountable for performance;
- Promote/Incentivise Crop diversification;
- Expand Farmer Access to Credit.
- Other Priority Areas for NABARD
- Expand role of RBI and the retail banking system in Agricultural Transformation;
- Implement Agricultural Marketing Reforms and Infrastructure Development across states;
- Require State Governments adopt Model Laws on Land Leasing and Contract Farming;
- Restructure/Reorganize Agricultural Research, Education and Extension
- Introduce Landscape Approch to Climate-smart Agriculture.

## SUGGESTED POLICY & PROGRAM ACTIONS 1. Establish Krishi Cabinets

<u>Weak implementation</u> of agricultural policies and programs is a major problem faced by the country both at the national and state levels. Most departments and agencies work in "silos" and do not effectively coordinate in planning and implementing development policies and programs. They also are not accountable for delivering desired outcomes. Krishi Cabinets at the national state levels should fill this gap and take an active role in implementation, going beyond issuing circulars.

#### 1. Establish Krishi Cabinets at the National & State Levels

<u>Madhya Pradesh</u> is a classic example of having effectively used the mechanism of Krishi cabinet. The Krishi Cabinet includes representatives of departments and missions concerned with agriculture including water, environment, etc.

The Krishi Cabinet meets once in almost every week – with participation of relevant secretaries and senior staff and on-line participation of district collectors and technical functionaries.

The Krishi cabinet ensures needed coordination among departments and agencies and timely supply of needed inputs, delivered to all districts down up to blocks and villages.

The Krishi cabinet also monitors progress of farm activities, crop performance, harvesting, planned procurement under MSP or otherwise and address any drying, storage, and marketing problems.

MP agriculture has been growing at about 20% per year for the past ten years. MP's Krishi model could be adopted both at the national and state levels adapted to their respective requirements.

#### 2. Action Plans for Doubling of Farmer Incomes

## Prioritize Recommendations & Prepare Action Plans From national to village levels

- A. There are multiple recommendations on the table for improved management of the agriculture sector at the state, district and taluk levels and increase farmer incomes (Example, Madhya Pradesh). The priority should be to ensure farmers' timely access to relevant inputs including seed, water, credit, markets and technical advice.
- B. There are major constraints in all these areas across the country, which much be systematically addressed at all levels, from the state to village level, and not only by the central government.
- C. All institutions and functionaries at the state level and below must own this challenge and be accountable for its accomplishment. At the national level, the proposed Krishi Cabinet or MOA should ensure that all states have well-defined programs or implementation frameworks to assist farmers in doubling incomes and monitor progress. Doubling Farmer Income should become a local program not only of Hon. PM's program!

- 2. Action Plans for Doubling of Farm incomes (Contd.)
- D. Actions Plans at national, state and district levels, in terms of both policy and programs, will deal with availability and/or cost of agricultural inputs, technology, credit, marketing and prices received by farmers without necessarily distorting markets.
- E. Implementation of action plans must be done through single process management, with accountability established at all levels, and through improvement in ease of doing business and not through regulations, except where it is warranted in terms of public interest.

#### 2. Action Plans For Doubling Farm incomes (Contd)

#### F. Role of NITI Aayog.

In its capacity of India's Think Tank, NITI Aayog should periodically assess the progress in state level preparation and implementation of Action Plans, check if the Action Plans are helping to accelerate agricultural growth and increase farmer incomes with participation of all stakeholders, and take periodic corrective measures to sustain the momentum. This is in line with NITI Aayog's mandate to address any constraints in accomplishing Hon. PM's economic agenda!

#### 3. Promote/Incentivize Crop Diversification

#### **Promote/Incentivize Crop Diversification**

- On the technology side, in the short term, GOI and state governments should deploy technical experts of ICAR, ICAR Institutes, State Agricultural Universities, KVKs to work with farmers and farmer organizations – if necessary, by reducing the time and funds that are currently devoted to research of low priorities.
- This work should proceed under a unified management (at the district level) to establish and implement district-wise agenda to address local issues in agriculture and its diversification to high value crops and productivity –using a farming systems apprach. This re-deployment of technical staff must take place on a war footing if the goal of doubling farm incomes is to be accomplished by Hon. Prime Minister's deadline of 2022.

## SUGGESTED POLICY & PROGRAM ACTIONS 4. Expand Farmer Access to Credit

## Proposed Round Table on Agricultural Investment and Finance Around End 2017

IAG has proposed to NABARD to organize a national level Round Table to discuss issues in Rural Investments and Finance vis-à-vis relative to the country's goals in agricultural growth and increase in farmer incomes.

Major stakeholders -- including representatives of NITI Aayog and Ministries of Finance, Agriculture, Rural Development, Food Processing Industries, Environment and Climate Change, Commercial and Cooperative banks and farmer organizations — will need to participate to understand and address constraints to flow of agricultural credit which is currently limited to some 20% of farmers.

Prior to this event, IAG expects that RBI and NABARD will address issues discussed with former RBI Governor Dr. Raghuram Rajan and NABARD Chairman Dr. Harsh Bhanwala.

## SUGGESTED POLICY & PROGRAM ACTIONS NABARD OPERATIONS: ISSUES RAISED BY IAG

- Deepen agricultural strategy/sector analysis in NABARD's annual statelevel credit plans;
- Expand Term Finance/Project Finance for Value Chain Development in Agriculture;
- Strengthen Risk Management Framework for Agriculture and Rural Finance;
- NABARD should play greater role in Climate Change Adaptation and Mitigation Projects; and
- GOI should diversify RIDF Scope and Operations within improved risk management framework

## **SUGGESTED POLICY & PROGRAM ACTIONS 5. Other Priority Areas for NABARD**

- <u>Scale Farming.</u> In the context of expanding urbanization and outflow of rural labor, NABARD should aggressively promote scale farming, using CA technologies in crops and horticulture, and genetic improvement of livestock. NABARD need to promote and fund relevant pilots to develop broader strategies and programs to accelerate transformation of India's rural/agricultural sector;
- Agricultural Pollution. NABARD should increase investments in projects for recycling agricultural bio waste to help reduce GHG emissions and promote efficient generation of renewable energy.
- <u>Farming Systems Approach.</u> NABARD needs to encourage farming communities to shift from crop-specific technologies and move to a farming systems approach using principles of Conservation Agriculture. Current efforts in this regard seem inadequate both from research and funding angles. Take note of what China is doing in this area.
- <u>Value Addition.</u> Without massive investments in value addition, Hon. PM's vision of doubling farmer incomes by 2022 is unlikely to be met. Currently, value addition investments are taking place on a scattered or ad hoc basis. There is not enough area-specific or sector-specific project identification and preparation work going on in most states. Should not NABARD, a development bank, take a lead in this area?

## **5. Other Priority Areas for NABARD (Contd)**

#### **Make Rural Financial Intermediation Viable**

- Rationalize Interest Rate Subsidies. Current interest rate and other subsidies need to be reformed. Interest rate subsidies and restrictions on relative spreads allowed for commercial and cooperative banks tend to discourage them from lending to farmers and increase their losses and NPAs. Replace interest rate subsidies by direct cash transfers to low income farm families.
- <u>Eliminate Reverse Incentives.</u> Existing subsidies, especially those for fertilizers, result in encouraging farmers to stick to crop-specific, highly polluting, crop-specific green house technologies and discourage farming systems approach using the principles of NRM and Conservation Agriculture. Farm subsidy programs need to be rationalized or eliminated to promote climate friendly agricultural technologies.
- Establish Risk Management Framework for Agriculture Finance. Except for crop insurance, the coverage of which is limited, there does not exist a comprehensive risk management framework for agricultural lending by banks and commercial banks. Frequent resort to loan rescheduling and write off. NABARD/RBI need to work on this aspect detailing responsibilities of government agencies responsible to assist farmers to manage farming risks.

#### 6. Expand Role of RBI and Other Banks in Agricultural Transformation

<u>Discussions with Former RBI Governor</u>, Dr. Raghuram Rajan indicated two major problems that the country must address, namely: (a) the lack of institutional or technical capacity at various levels to deal with complex sectoral issues in a coordinated way; and (b) the Turf issues because of which various stakeholders fail to come together and act in a coordinated way.

<u>Leading institutions</u> like RBI, NABARD, NITI Aayog and ICAR should come together and work with concerned central and state government departments and the private sector to develop/implement a time-bound coordinated strategies and action plans to transform rural/agricultural sector.

RBI to work on reform of the Lead Bank scheme. RBI should use its leverage as the central bank of the country and as part of its financial inclusion strategy, develop proposals to reform the country's rural finance that will help accelerate agriculture's restructuring and revitalization. Dr. Rajan had noted that this work could be done as part of RBI's ongoing work on the revision of the Lead Bank scheme currently underway.

## SUGGESTED POLICY & PROGRAM ACTIONS 7. Agricultural Marketing

NITI Aayog has proposed important reforms in agricultural marketing which are at various stages of processing (See, NITI Aayog Report of October 2016).

- Reform APMC system to protect farmer interests allow them to sell their products directly to buyers and not through intermediaries, to improve prices received by farmers. Amending APMC Acts must be done on the highest priority basis. The APMC Act should not be the authority for registration or dispute settlement under contract farming.
- Take fruit and vegetables out of APMCs Exclusive Purview; Restructure Essential Commodities Act, Encourage Contract and Group Farming; Deepen eNam extending its coverage from 400 markets to planned 585 markets. More work is needed on quality certification, dispute settlement mechanisms; and promote FPOs. Allow setting up of private mandis; Introduce single entry point levy on agricultural produce; Provide Single License to traders for the whole state; Rationalize taxes on agricultural commodities; Implement e-NAM in all states.
- Land Leasing & Contract Farming: The recently circulated Model Law on Land Leasing does not provide for legal framework for contract farming. Appropriate legal framework for contract farming must be soon introduced. Require state governments to bring these model laws on their statute.

#### 7. Agricultural Marketing (Contd)

<u>eNam:</u> Farm to Urban marketing infrastructure remains grossly under developed in terms of aggregation, sorting, grading and primary processing of agricultural produce. Consequently, farmers receive only a small portion of prices paid by consumers. While APMCs are getting connected with eNAM, there is a huge gap in the marketing infrastructure from farm to APMCs or other wholesale markets?

Mega Food Parks. The Mega Food Program implemented by GOI's Ministry of Food Processing Industries needs to be urgently reviewed and amended.

First, Farmers or Farmer Organizations have no representation in the equity or management of Mega Food Parks. Why is this situation accepted when GOI is provides up to Rs 50 crores of subsidy per project?;

Second, there is no provision in these projects to sort and grade fresh farm produce and transport it to nearby urban – consumer --markets where famers could receive better prices relative to those offered by Mega Food Parks.

There is a conflict of interest here. MOFPI says that it has no mandate to create marketing facilities for sale of fresh produce directly in urban markets which is the responsibility of the Ministry of Agriculture. The fallout is that Mega Food Parks do not have farmer participation in management.

#### 8. Model Land Leasing Law & Contract Farming

- Recently circulated Model Law on Land Leasing does not provide for Contract Farming per se though it may facilitate the creation of contract farming arrangements through leasing of land.
- There is view in public dialogue that if contract farming must be promoted in India, it would be ideal if there is in place a self-standing Contract Farming Law providing for a complete legal framework for administration of contract farming while protecting the land rights of farmers entering in to contracts and of those entities taking over the land for cultivation.
- There is a concern expressed by some commentators that the new law on land leasing could potentially lead to diversion of land to non-agricultural uses although the law enables the lessor to prevent this from happening by asking cancellation of the lease contract.
- The potential diversion of agricultural lands to non-agricultural uses could also be prevented if zoning laws enacted and administered by the state or local governments are strictly enforced. GOI needs to clarify if a selfstanding Contract Farming Law will be introduced and how currently weak administration of zoning laws could be improved?

#### 9. Restructure/Reorganize Ag Education, Research and Extension

- The national level ICAR, ICAR Institutes and KVKs, and the state level agricultural universities (SAUs) and ATMAs have made important contributions in the past over four decades in deepening green revolution technologies and making India not only self-sufficient but even net-exporter in food.
- However, in the context of India's 21<sup>st</sup> century challenges in the areas of agricultural research, education and extension which should be increasingly based on NRM principles and climate-smart technologies for sustainable food security, time has come to review and reform these institutions' mandates, operations, and performance. ICAR Review Committee is looking at these issues – its report is awaited. The basic policy decision to reform NREE system needs to be taken without delay.

## SUGGESTED POLICY & PROGRAM ACTIONS 10. Landscape Approach to Climate Smart Agriculture

IAG has developed a Concept Paper on the climate change pilot for MP, using a "landscape approach" which is also called as "ecosystem" approach. This pilot titled: "Integrated Development of Climate-Smart Agricultural & Forest Communities Using a Landscape Approach in MP's Betul district" is under processing for potential GCF grant.

The Landscape provides tools and concepts for allocating and managing land to achieve social, economic and environmental objectives in areas where agriculture and other types of land uses including forestry, mining and other productive land uses compete with environmental and biodiversity goals.

This approach provides for a framework by which outcomes negotiated among stakeholders are reached most effectively – this means conflicting objectives are resolved, subject to changing societal desires which vary from place to place and over time. Landscape approaches have emerged through discussions at international forums, as the most widely advocated means to address growing pressures on land, water, and other resources and to accommodate the needs present and future generations. IAG would like to explore with the Ministry of Agriculture if it would to extend the land scape approach more widely in India.

#### **India Agriculture Vs Food Security?**

- Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life". (World Food Summit, 1996)."
- Food availability: The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid).
- "Food access: Access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources);
- **Utilization:** Utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. This brings out the importance of non-food inputs in food security.
- Stability: To be food secure, a population, household or individual must have access to adequate food at all times. They should not risk losing access to food as a consequence of sudden shocks (e.g. an economic or climatic crisis) or cyclical events (e.g. seasonal food insecurity). The concept of stability can therefore refer to both the availability and access dimensions of food security. Besides availability and access, the food security now takes into account, all human needs including nutrition).