

# Brainstorming on Achieving Inclusive Growth by Linking Farmers to Markets

## Proceedings & Recommendations



24 June 2013  
at Library conference Hall, IARI, New Delhi



**Organized by**  
**Trust for Advancement of Agricultural Sciences (TAAS)**  
**Indian Council of Agricultural Research (ICAR)**  
**International Crops Research Institute for Semi-arid Tropics (ICRISAT)**



## **Trust for Advancement of Agricultural Sciences (TAAS)**

### **GOAL**

An accelerated movement for harnessing agricultural science for the welfare of people.

### **MISSION**

To promote growth and advancement of agriculture through scientific interactions and partnerships with stakeholders.

### **OBJECTIVES**

- To act as think tank on key policy issues relating to agricultural research for development (AR4D).
- Organizing seminars and special lectures on emerging issues and new developments in agriculture.
- To institute national awards for the outstanding contributions to Indian agriculture by the scientists of Indian and other origin abroad.
- Facilitating partnerships with non-resident agricultural scientists visiting India for short period.

#### **Chairman**

Dr. R.S. Paroda

#### **Secretary**

Dr. N.N. Singh

#### **Members**

Dr. S. Ayyappan

Dr. B.R. Barwale

Dr. H.S. Gupta

Dr. A.K. Srivastava

Dr. (Mrs.) Rita Sharma

Dr. K.L. Chadha

Dr. Gurbachan Singh

Dr. Narendere Gupta

#### **Vice President**

Dr. P.L. Gautam

#### **Treasurer**

Dr. P.K. Joshi

# **Brainstorming on Achieving Inclusive Growth by Linking Farmers to Markets**

## **Proceedings & Recommendations**



***Organized by***

**Trust for Advancement of Agricultural Sciences (TAAS)**

**Indian Council of Agricultural Research (ICAR)**

**International Crops Research Institute for Semi-arid Tropics (ICRISAT)**

at Library conference Hall, IARI, New Delhi  
on 24 June 2013

For copies please visit: [www.taas.in](http://www.taas.in) or write to:

Coordinator

Trust for Advancement of Agricultural Sciences (TAAS)

Avenue II, Indian Agricultural Research Institute,

New Delhi - 110012

Ph.: 011-65437870; Fax: 011-25843243

E-mail: [taasiari@gmail.com](mailto:taasiari@gmail.com)

Printed on January 2014

# Contents

## **Brainstorming Workshop on Achieving Inclusive Growth by Linking Farmers to Markets**

Preamble	1
Need for Linking Small Farmers to Markets	1
About the Workshop	2
<b>Session I:</b> Lead paper presentations	3
<b>Session II:</b> Discussions	6
Main Recommendations	9
Program	11
List of Participants	13
Dr. William D. Dar	
Enhancing Smallholder Farmer Participation in Markets: The IMOD Way	15



# **Brainstorming on Achieving Inclusive Growth by Linking Farmers to Markets (LFM)**

## **Preamble**

Predominance of small holders in Indian agriculture has been increasing. During the last decade, share of smallholders possessing land less than 2 hectares has increased from 81 to 85 per cent. The western model of eventual rise in size of land holdings has not happened in India. The emerging trend indicates that the number of smallholders will still increase in future. As these farmers constitute more than 85 per cent of the farming population and cover about 44 per cent of area under cultivation, improving their livelihood opportunities is crucial for future development of India. Further, this section of farming community assumes significance not only because of numerical strength but also from the point of view of production. The share of smallholders in total agricultural production is much higher as they have higher per hectare productivity compared to medium and large land holdings. Thus, any achievement in the farming sector is rather impossible without full involvement of smallholders.

## **Need for Linking Small Farmers to Markets**

There is no doubt that LFM is critical for improved livelihood of small holder farmers and beneficial for the consumers. Smallholders are more efficient in production, yet they face serious disadvantages in marketing of their produce. As a result, smallholders are often bypassed in the process of transformation of agriculture and agri-food and marketing systems. Although, it is relatively easy for smallholders to diversify towards high-value crops owing to their higher resource flexibility and better family labour availability, yet they face disadvantages in terms of scale in production and market. Moreover, they have small marketable surpluses that are costlier to trade in the distant urban markets due to higher transportation and transaction costs. Hence, efforts to improve productivity on small farms may not directly result in higher income unless these are appropriately linked with markets. Their integration in markets or value chains would require pro-smallholder policies that create an enabling environment for attracting various stakeholders to act together in processing, marketing and also sharing the benefits on account of emerging market opportunities. These include innovative institutional mechanisms, better infrastructure, greater involvement of private sector with smallholders, easy access to agricultural and market information and risk management mechanisms and above all favourable business environment through stable marketing and trade policies.

## About the Workshop

In order to address the above issues and to propose concrete recommendations, a brainstorming workshop was organized by TAAS, NCAP /ICAR and ICRISAT to discuss the need for new approaches of linking farmers to market. About 40 experts representing government, industry, farmers' organizations, and national and international organizations participated in the deliberations.

This important issue was discussed in two sessions. Session I included five presentations from experts and policy makers who highlighted the need for linking farmers to markets and the role of the governments and industry in facilitating the process. Actual ground level functioning of various innovative mechanisms for linking farmers to markets was discussed in Session II. Copy of the program and list of participants are given in **Annexures I and II**, respectively.

The technical discussion was preceded by a presentation by Dr William D Dar, Director General, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), who received that morning the prestigious Dr. M.S. Swaminathan Award for Leadership in Agriculture for 2013. Dr Dar set the stage by delivering a key note address on "Enhancing Smallholder Farmer Participation in Markets: The IMOD Way<sup>1</sup> i.e., Inclusive Market Oriented Development. (**Annexure III**)

Dr. William Dar emphasised that a strategic framework is like a lantern in the night, providing vision in the darkness. It guides our work along the path that leads to our most cherished goals. It prevents us from going astray, and helps us to better help the poor to fulfil their deepest aspiration – not just to be less poor, but to escape poverty altogether. That is the purpose of IMOD.



He further stated that IMOD gives us many gifts. It causes us to look at old problems in new ways, and to look for new and innovative solutions. It leads us to renew and enlarge our partnerships. It broadens our awareness, causing us to consider how farming fits into the larger framework of society. It gives us a clear logic for uniting socio-economic and biophysical research. It reminds us that smallholder farmers need markets, and markets need smallholder farmers. It insists that we must consider risks as well as rewards. It makes clear that development is a dynamic process, not a static event. IMOD prompts us to go far beyond just increasing yield

<sup>1</sup>Keynote Address delivered by Dr. William D. Dar, recipient of the 2013 Dr. M.S. Swaminathan Award for Leadership in Agriculture, instituted by the Trust for Advancement of Agricultural Sciences (TAAS) in New Delhi, India.

potential. It requires that we measure that actual value that our innovations bring to the lives of the poor. He concluded by stating that at the end of the day, that value is what matters most to us. Hence, all efforts be now aimed at achieving IMOD for improving the livelihood of small holder farmers.

## Session 1: Lead paper presentations

This session was Co-Chaired by Dr. Abhijit Sen, Member Planning Commission and Dr. William D. Dar, DG, ICRISAT. Five lead papers were presented in this Session and an overview of these is given below:

### 1. Role of price policy in inclusive growth

Dr Ashok Gulati, Chairman, Commission on Agricultural Costs and Prices (CACP) highlighted the role of prices in the success of Green Revolution in India and also discussed some contemporary issues related to agricultural price policy and small farmers.

The CACP fixes the minimum support prices (MSP) for a number of food and non-food commodities. These are effectively implemented for a few commodities, mainly rice and wheat that are procured by the government for public distribution system as well as for buffer stocking. Further, there is a significant difference in the effectiveness of MSP across states. MSP has been successfully implemented in Punjab,



Haryana and Andhra Pradesh, and recently in Chhattisgarh and Madhya Pradesh. In many other states, majority of the farmers are not aware of MSP and procurement agency because of thin market infrastructure and lack of information. As a result, the farmers often sell their produce to local traders, who invariably exploit them.

Some state governments even provide bonus on MSP announced by the CACP. This helps farmers realize more income, but serves as a barrier to inter-state trade. Besides, assured off take of rice and wheat at minimum support prices creates a risk-free environment for farmers, but discourages them to diversify towards high-value crops that are labour-intensive but can offer higher income.



Agricultural markets are overcrowded and their spread has

not kept pace with the agricultural production trends. The governments should focus on creating market infrastructure in the lagging states.

Some states, in order to facilitate direct transaction between buyers and sellers, have repealed APMC Act. Their experience, however, suggests that some sort of regulatory mechanisms need to be in place to keep competition alive and to counteract tendencies on monopsony or oligopsony. However, more studies need to be conducted to evaluate both pros and cons of this practice.

## **2. Building farmers' institutions to integrate producers in the agri-value chains : Lessons and prospects**

Mr Pravesh Sharma, Chairman, Small Farmers Agri-business Consortium discussed the importance of markets, information and food safety regulations in building up successful agri-value chains in the context of changes in food basket and consumer preferences. He highlighted that only 40 per cent farmers access any kind of



information and a majority of them from fellow farmers. Public extension system is currently weak and caters to the need of only 5 per cent farmers. Most of the information is related to seeds and fertilizers. In the past, agricultural growth was driven by technology. However, in view of changing food basket and rising concerns for food safety and quality, the future growth in agriculture will certainly be market-driven, suggesting a greater need for developing market information system, standards and risk management tools.

Small farmers are efficient in production, especially high-value commodities and they have been responding well to the incentive structures designed for these commodities. But, most high-value commodities, being perishable, need to be transported to the consumption centres immediately or transformed into less perishable forms soon after harvest. For small farmers, selling in distant urban markets is not remunerative due to high transaction costs associated with small marketable surpluses.

Market information services need to be designed to better inform market participants. Access to market information will improve understanding of markets and make the whole process transparent. This will help the farmers choose specific markets for their produce.

Market information services will also have to become more sophisticated to include buyers or consumers' preferences for quality and safety, as well as price forecasts.

The development of relevant and enforceable food safety laws and regulations is an essential component of the modern food marketing system so as to facilitate farmers' compliance to the national and international food safety laws and regulations.

### **3. The role of farmer producer companies to render an evergreen economy: Experiences from UP and Bihar**

Dr Ashis Mondal and Mr Arjun Uppal discussed some successful field experimentation of market linkages and the possibilities of their large-scale replication. Dr Mondal demonstrated how producer companies in Madhya Pradesh and Rajasthan could enhance small farmers' access to technology, skills, inputs and output market besides enhancing their business skills and bargaining power. He also highlighted that by using producer companies as platform, the farmers could enhance their crop yields by 40-50 per cent, improve land and water resources and ensure better quality of produce besides reducing production and transaction costs.

### **4. Private sector initiatives in agri-business**

Mr Arjun Uppal discussed the case of a successful agribusiness venture pioneered by Kaushalya Foundation in Bihar especially to enable farmers to have access to improved technologies, quality inputs, support services and credit.

Promote institutions such as growers' associations and producer companies (e.g. Mahagrapes, Grofed, NDDB, etc.) that provide remunerative markets to small farmers and enhance their bargaining power vis-à-vis large agribusiness firms. Not only that, such institutions will help farmers to have an improved and cost effective access to technologies, inputs, services and skills, which will ultimately reduce cost of production, higher adoption of good agricultural practices and contribute towards sustainable agricultural development.

The case study provided useful insights on the emerging institutional innovations. Based on this it was felt that more such case studies should be conducted to quantify the reduction in marketing and transaction costs from innovative market linkage models. This should indicate ways and means of scaling up innovations in marketing involving the small and marginal farmers.

### **5. Financing value chains for smallholder empowerment**

In their presentation, Drs PK Joshi and PS Birthal discussed the advantages and disadvantages of various models, linking small farmers to markets, using value chain approach. They demonstrated that provision of an assured market to farmers brings down their transaction costs, while agribusiness firms benefit from assured supply of quality produce. They also showed that finance is one of the major constraints in scaling up such institutional innovations. Farmers, traders, processors and retailers require finances to overcome liquidity constraints and managing risks. In India, institutions for delivery of credit are fairly well developed. Commercial banks, cooperatives, micro-finance

institutions, etc. to an extent provide credit to different stakeholders along the value chain, but a considerable proportion of these are not appropriately financed, and the demand for credit outstrips the supply. The focus of financing is on individual actors in the chain but not on the entire chain. Because of this finance loses its power to promote integrated value chain. Risk-mitigating mechanisms for value chain, though developing, but are in infancy. Given this scenario, there is a need to promote innovations to facilitate both financing and risk management at the level of value chain.

Small farmers face high market and price risks. Institutional or market-based mechanisms, though, against price risk are weak and their outreach so far is extremely limited, particularly at the upstream of the value chain. Protection against price risks is almost absent. Small farmers rarely participate in recently developed mechanisms like warehouse receipt, futures market .

Value chain concept in India is relatively new but it is quite developed and popular in developed countries. Therefore Foreign direct investment (FDI) with experience in value chain is a promising option to financing and developing value chains for agricultural commodities in India. In this context the opening of food retailing to multinational companies due to FDI is likely to boost value chain development linking small holders to the chain.

## Session II : Brainstorming Session on Linking Farmers to Markets

The Co-Chairs for this session were Dr. PG Chengappa, ICAR National Professor and Dr. PK Joshi, Asia Director, IFPRI. They raised following issues for discussion:

1. What are the successful models of linking farmers to markets including contractual arrangements and lessons for their upscaling?
2. What are the prospects of innovative mechanisms like producer companies, self help groups and collectivization for LSM
3. What market reforms are needed for providing favourable environment for the emerging and successful small scale models?



### **1. Successful models of linking farmers to markets including contractual arrangements and lessons for their upscaling**

Traditional value chains for agriculture are fragmented and the system of marketing do not permit direct transactions between producers and buyers. Contract farming has emerged as an alternative marketing model to overcome this problem.

Experience related to success of contract farming has mixed results. ITC model is a success story which sources wheat and soya and allows traceability, benefiting buyers and sellers. It has worked well for potatoes as well and the company has created branded products on the basis of this farmer networked supply chain. Another example of a successful model is vegetable cultivation by tribal women of Madhya Pradesh (MP). The Pradhan – Syngenta Foundation partnership has a project on vegetables in MP. The Foundation provides full package of production to the growers, hand hold until producers are on their own and then link them to markets. Here, the Foundation is playing a facilitation job to link farmers to markets. Additionally, the Foundation supports the women farmer groups financially and provides market intelligence. The lesson here is to find the right organization for the last mile delivery in the farming communities who can deliver the goods without giving any subsidy to the farmers. The soybean story in Madhya Pradesh is another successful and sustainable model in which all farmers have benefitted

Similarly, contract farming has worked very well in poultry and dairy. However, for spices, fruits and vegetables, the model is still evolving.

Replicability and applicability of contract farming models are important. We need to investigate why such models have not taken off for dryland cereals and pulses? Pricing is the main issue in contract farming. Fixed pricing models have generally failed. Flexible and transparent prices are a must. Mutual trust, and capacity building are the key factors (Nestle milk procurement model). Private sector closer to big



urban markets and procuring from remote areas can lead to success of contract farming, though the product differentiation / customisation should be able to offset any pricing differentials. In the case of smallholders the role of village level aggregator (a lead farmer /local innovative person) to facilitate activities between farmers and the company is crucial.

## ***2. Prospects of innovative mechanisms like producer companies, self help groups and collectivization for Linking Farmers to Markets***

Producer company (PC), farmers Association and self help group are some examples of organising small holders for marketing. Producer Company can start with farmers grouping into informal associations, than cooperatives and finally form into a company. Successful PCs have to be professionally managed like, for example, Mahagrapes. Initially, some hand holding is also important.

PC is like a cooperative with a more formal structure. For PC, the important issues will be: How is it going to be managed and how will the resources be shared? Functioning of producer company is bound on joint liability, as when even one person defaults, all will be responsible. One share one vote is also a problem given the differing land size holdings.



Paper work for PC is invariably not easy for the farmers. Farmer needs hand holding initially. The pressure for PCs came from the private sector as they needed somebody at local level to aggregate produce for them. PCs can meet farmer interest but it cannot be a game changer. Only for perishables, PC can benefit the farmers as also for niche markets, for example, *durum* wheat. For cereals and pulses, where margin is low we need some other model. Unfortunately, most of the successful models are company driven and not farmer driven.

Lessons from micro credit programs where more women play an important role, can be scaled up and in a small way to move towards forming producer company. Thus, instead of formal PC, can we go in for some informal arrangement within certain operating guidelines? Professional management is important for sustainability and, therefore, initial training and support is essential.

How to make PC successful? There is no single answer as each location / crop has had different experiences.

Several women self-help groups (SHGs) have diversified into procurement and production of several commodities, However, they need marketing support or linkages with end users as has been achieved by Self Employed Women Association (SEWA). A study of the success story of *lijjat papad* will be quite interesting.

### **3. SFAC, NDDDB, and NABARD are facilitating formation of PCs to enable farmers for better realisation of prices for their produce. Market reforms for providing favourable environment for the emerging and successful small scale models**

Obviously, new models and arrangement require changes in market regulations.

Model APMC Act and other market reforms framed by the central government are effective only if these are implemented by the state governments as marketing is a state subject. The implementation is unfortunately at a very slow pace by the state governments. For instance, even after the reforms under the Model Marketing Act, the market fees has to be paid by the farmer even if he sells outside the market.

Thus, some of the purpose of such reforms is lost.

Often it is argued that state will lose exchequer by implementing Model Marketing Act. Therefore, it was proposed that the flowers, fruits and vegetables, which involves small contribution to state exchequer, may be delinked from the purview of existing APMC Act. For example, the



revenue to state from fruit and vegetable marketing in Haryana is about Rs.15 crores but loss to farmers due to loss of freedom to sell these products is many folds due to their perishable nature. Hence, perishables should be delinked from the purview of APMC Act and collection centres with grading and packaging facilities should be created in producing areas for fetching higher prices to farmers.

### Main Recommendations

Importance of market has increased significantly in the recent years due to high degree of commercialization of agriculture and the pressing need to improve income of producers to keep at least some pace with income of non agriculture sector. Markets are becoming focus of policy goals like inclusive growth as they determine welfare of consumers and producers. India has been experiencing high rate of food inflation at retail and whole sale level and a disconnect is appearing and widening between prices received by producers and those paid by consumers. As a result, consumers end up paying higher price and producers have to be content with low prices as compared to what is possible in an efficient and well integrated marketing system. Much of the measures for reducing poverty and improving nutrition loses their effectiveness due to high inflation at retail level. The concern to sustain food security is becoming more serious as interest in farming is diminishing due to low income from farming. It is apparent that the twin goal of improving farm income through better price realization and making food available to consumer at lower price cannot be attained without linking farmers to market or linking plough to plate. The brainstorming session deliberated on this issue at length covering depth and range of India's agricultural marketing experiences. The main recommendations are listed below:

- There is considerable scope to improve market efficiencies, reduce price spread and raise producer share in consumer rupee. This requires empowerment of farmers to harness market through policy reforms, institutional changes and knowledge sharing.
- Existing marketing regulations like APMC act require changes to offer freedom and better choices to farmers for sale of his produce. However, this may not

happen automatically and require action on several fronts like new institutions of farmers, increased private sector role in marketing, better infrastructure and commitment of State Government to protect interaction of producers (farmers) and consumers.

- New mechanisms like Producer Companies, Self Help Groups, contract farming have shown promising and beneficial effects in some segments of agriculture and in some pockets. Their upscaling and replication is a real challenge. This requires a relook into these models so as to make them more farmer friendly. Documentation of success stories at regional, national and global level and conditions for their success need to be ensured through supportive policy environment.
- Private sector can play an important role in scaling up and scaling out so as to have win-win models of linking farmers to markets. The partnership between public and private sector can take many forms, e.g. marketing cooperatives; development of cold storages, etc. For building public-private partnership, the government should provide incentives, higher investments and needed infrastructure, besides stable policies for faster development of agribusiness.
- At the grass-root level, the government with the help of either farmers or NGOs should facilitate growth of farmers' cooperatives or associations or producer companies through handholding of farmer-members in terms of empowering them in business skills, capital investment and risk management.
- Provision of credit, associated with development of warehouse receipts system, is an important mechanism that offers farmers, producer organizations and traders access to secured and reliable storage, which provide them with documentary title to their produce and thus enable them to obtain finance. This will avoid forced sales and help farmers realize better prices. The system may also minimize storage losses, and bring in efficiency in trade, while enabling small farmers to participate in markets while managing market risks. This practice should be given full policy support for bringing small holders in its fold.
- Role of women and rural youth in LFM will be of great advantage. We need to design women and youth centric programmes for their active role in agri-food value chain and support them through all means. FDI, contract farming rules/regulations be reviewed to ensure protection of interests of both parties
- With regard to contract farming, there is an urgent need to have interface with the private sector and farmers so as to assess their needs and concerns to ensure an enabling environment for them to succeed.
- New and evolving market mechanism like virtual market should be tried on pilot basis in some areas and replicated based on success so achieved
- A policy dialogue on linking farmers to markets should take place at the national level involving policy makers, senior officials of concerned Ministries, scientists and representatives of Private Sector, Farmers, NGOs and IARCs.

**Annexure I**

## Program

---

### Session I : Lead Paper Presentations

1200 to 1330 hrs

**Co-Chair:** Dr. Abhijit Sen, Member, Planning Commission

**Co-Chair:** Dr. William D. Dar, DG, ICRISAT

**Rapporteur:** Dr. P.S. BIRTHAL, Principal Scientist, NCAP

*(15 Minutes each)*

- 
1. Role of Price Policy in Inclusive Growth  
*Dr. Ashok Gulati, Chairman, CACP*
  2. Building Farmers' Institutions to Integrate Producers in the Agri Value Chain :  
Lessons and Prospects  
*Sh. Parvesh Sharma, Managing Director, SFAC*
  3. The Role of Farmer Producer Companies to Render an Evergreen Economy:  
Experiences from M.P. and Bihar  
*Dr. Ashis Mondal, Director, Action for Social Advancement*
  4. Private Sector Initiatives in Agri-business  
*Mr. Arjun Uppal, Vice President, Corporate Affairs, DCM Shriram  
Consolidated Ltd*
  5. Financing Value Chains for Smallholder's Empowerment  
*Dr. P.K. Joshi, Director- South Asia, IFPRI & Dr. P.S. BIRTHAL, Principal  
Scientist, NCAP*

**Lunch**

1330 to 1430 hrs

---

### Session II : General Discussion

1430 to 1630 hrs

**Co-Chair:** Dr. P. G. Chengappa, ICAR National Professor

**Co-Chair:** Dr. P.K. Joshi, Director- South Asia, IFPRI

**Rapporteur:** Dr. Parthasarthy Rao, Pr. Scientist, ICRISAT

---

#### Issues for Discussion

1. Contract farming and small holders
  2. Producers company and self-help group
-

3. Hurdles to amend APMC Act
  4. FDI in retail trade and small holder
  5. New innovative models in agriculture marketing
  6. Role of modern value chain
  7. Any other issue
- 

**Plenary Session : Conclusions and Recommendations**

1630 to 1700 hrs

**Co-Chair:** Dr. S. Ayyappan, Secretary, DARE & DG, ICAR

**Co-Chair:** Dr. R.S. Paroda, Chairman, TAAS

---

**Presentation of Recommendations**

Session I : *Dr. P.S. Birthal, Principal Scientist, NCAP*

Session II : *Dr. Parthasarthy Rao, Principal Scientist, ICRISAT*

**Remarks by Dr. S. Ayyappan, Secretary, DARE and DG, ICAR**

**Remarks by Dr. R.S. Paroda, Chairman, TAAS**

---

**Annexure II**

**List of Participants**

1. Dr. Usha Rani Ahuja, Principal Scientist, NCAP, DPS Marg, Pusa, New Delhi - 110012
2. Dr. G. Basavaraj, Scientist RP MIP, ICRISAT, Patancheru - 502324, Hyderabad, Andhra Pradesh
3. Dr. P.S. BIRTHAL, Pr. Scientist, NCAP, DPS Marg, Pusa, New Delhi - 110012
4. Dr. P.G. Chengappa, ICAR National Professor, Institute for Social and Economic Change (ISEC), Bangaluru - 560072, Karnataka
5. Dr. William D. Dar, Director General, ICRISAT, Patancheru - 502324, Hyderabad, Andhra Pradesh
6. Dr. M.B. Dastagiri, Pr. Scientist, NCAP, DPS Marg, Pusa, New Delhi - 110012
7. Dr. Sheila E. Desai, Deputy Director, Office of Food Security, USAID, American Embassy, Shantipath Chankaypuri, New Delhi - 110021
8. Dr. Pooran M Gaur, ICRISAT, Patancheru - 502324, Andhra Pradesh
9. Dr. Ashok Gulati, Chairman, Commission for Agricultural Cost and Prices, Krishi Bhawan, New Delhi - 110114
10. Dr. H.S. Gupta, Director, IARI, Pusa, New Delhi - 110012
11. Dr. Narendra Gupta, Trustee, TAAS, Pusa Campus, New Delhi - 110012
12. Shri Ajay Vir Jakhar, Chairman, BKS, A-1, Nizamuddin West, New Delhi - 110013
13. Dr. Girish Kumar Jha, IARI, Pusa Campus New Delhi - 110012
14. Dr. P.K. Joshi, Director in Asia, IFPRI, NASC, Pusa, New Delhi - 110012
15. Dr. K.D. Kokate, DDG (Extn.), KAB-I, Pusa Campus, New Delhi - 110012
16. Dr. Shalander Kumar, Head, Transfer of Technology, Training and Production Economics, CAZRI, Jodhpur - 342003, Rajasthan
17. Dr. Shiv Kumar, Senior Scientist, NCAP, DPS Marg, Pusa, New Delhi - 110012
18. Mr. V Vijay Kumar, Chief Business Officer, National Commodity & Derivatives, Exchange Limited, Gayathri Towers, 954, Appasaheb Marathe Marg, Prabhadevi, Mumbai - 400025
19. Dr. A. Ashok Kumar, ICRISAT, Patancheru - 502324, Andhra Pradesh

20. Dr. G. Dileep Kumar, ICRISAT, Patancheru - 502324, Andhra Pradesh
21. Dr. Anjani Kumar, Pr. Scientist, ICRISAT, NCAP, Pusa, New Delhi - 110012
22. Dr. G. Narendra Kumar, IAS, Director (Country Relations & Business Affairs), ICRISAT, 1st Floor, CG Centers Block, NASC Complex, New Delhi - 110012
23. Dr. Suresh Kurup, Senior Scientist, NCAP, DPS Marg, Pusa, New Delhi - 110012
24. Dr. Bhag Mal, Consultant, APAARI C/o, TAAS, Avenue II, IARI, Pusa, New Delhi - 110012
25. Dr. V.C. Mathur, Pr. Scientist, Economics Div., IARI, Pusa, New Delhi - 110012
26. Mr. Ashis Mondal, Director, Action for Social Advancement, E-5/A Girish kunj, Arera Colony above SBI Shahpura Branch, Bhopal - 462016, Madhya Pradesh
27. Dr. Allan Mustard, Minister Councilor for Agricultural Affairs, American Embassy, Shantipath Chankaypuri, New Delhi - 110021
28. Dr. Suresh Pal, Head, Economic Division, IARI, Pusa, New Delhi - 110012
29. Dr. R.S. Paroda, Chairman, TAAS, Pusa Campus, New Delhi - 110012
30. Dr. K.N. Rai, Consultant, HKA, CCSHAU Campus, Hisar - 125004, Haryana
31. Dr. Parthsarthy Rao, Pr. Scientist, ICRISAT, Patancheru - 502324, Andhra Pradesh
32. Dr. M. Srinivas Rao, ICRISAT, Patancheru - 502324, Andhra Pradesh
33. Mr. Baskar Reddy, Executive Director, Syngenta India Ltd, G-8, Hans Bhavan, Bahadur Shah Zafar Marg, New Delhi - 110002
34. Dr. Raka Saxena, Senior Scientist, NCAP, DPS Marg, Pusa, New Delhi - 110012
35. Dr. Abhijit Sen, Member, Planning Commission, Yojana Bhavan, Sansad Marg, New Delhi - 110001
36. Shri Pravesh Sharma, MD, Small Farmers' Agri-Business Consortium, NCUI Auditorium Building, 5th Floor, 3, Siri Institutional Area, August Kranti Marg, Hauz Khas, New Delhi - 110016
37. Dr. Kiran Sharma, ICRISAT, Patancheru - 502324, Andhra Pradesh
38. Dr. N.N. Singh, Secretary, TAAS, Pusa Campus, New Delhi - 110012
39. Mr. Arjun Uppal, Vice President, Corporate Affairs at DCM Shriram Consolidated Ltd, 5th Floor, Kanchenjunga Building, 18 Barakhamba Road, New Delhi - 110001
40. Dr. S.P. Wani, ICRISAT, Patancheru - 502324, Andhra Pradesh

**Annexure III**

## **Enhancing Smallholder Farmer Participation in Markets: The IMOD Way**

by

**Dr. William D. Dar**

Dear Friends,

I am deeply honored to receive the Dr M.S. Swaminathan Award for Leadership in Agriculture for 2013. I consider this to be a major milestone in my professional life. I am humbled to be asked to join the list of outstanding awardees that have contributed so much to improving the human condition.

This Award is about leadership. I believe that the most important task of a successful leader is to rally his team around a compelling vision of the future, and to have an effective strategy to bring that vision into reality. Today I want to highlight the vision and strategy that our ICRISAT global team developed in 2010 and has been implementing ever since. We call it *Inclusive Market-Oriented Development*, or **IMOD** for short. We are very excited about it, and would like to state at the outset that all our research for development efforts are accomplished with strategic partners who also share our enthusiasm for IMOD.

### **Agricultural development: the long view**

To explain **IMOD**, I must first put it into context.

The CGIAR was established in the early 1970s at a time when mass famines were thought to be inevitable in the developing world. Food production was falling well short of the needs of rapidly increasing populations. So, increasing the production of staple food crops, particularly cereals, was the CGIAR's urgent first priority.

That effort helped to fulfill the promise of the Green Revolution in rice and wheat, which had begun a few years earlier. Production gains were so rapid that famine was averted. This was an enormous achievement!

Yet, while the yields of those crops more than doubled, hundreds of millions of people still remained hungry and malnourished, particularly those living in marginal farming areas such as the drylands. The Green Revolution varieties were not well suited to the dry areas, because irrigation and fertilizer were not easily available.

Then, the 1990s brought major economic upheaval to the developing world through ‘structural adjustment’ and economic liberalization. Agriculture slipped to a lower priority on national agendas. Industrial and urban development became higher priorities. Many agricultural support programs and institutions were downsized or dismantled.

Marketing was deregulated, so more opportunities were opened to the private sector. But the private sector in general was less interested in poor smallholders. The private sector preferred the simplicity of sourcing its raw materials from big commercial growers. It needed to deal at large scales to minimize costs and maximize profits.

All these changes hit the poor hard. Smallholder farming families lost many of their supporting institutions and services. Costs of inputs soared due to the removal of subsidies. Meanwhile, the prices that the poor received for their crops fluctuated wildly due to market deregulation and their lack of power in the marketplace.

As poor smallholders were increasingly “on their own”, economists realized that they were hungry not only because they were not growing enough food, but because they couldn’t afford to *buy* the food that they were unable to produce. To become food-secure, they needed options that **both** increased their production **and** increased their incomes.

At the same time, we in the CGIAR were struggling to adapt to these enormous changes. We did not have a solid framework for addressing the new world economic structure. In reviewing the science agenda in 2001, the CGIAR’s highest science body, the Technical Advisory Committee (TAC), said:

*In order to address the stubborn persistence of poverty, particularly in the rural areas amidst rising global food supplies, the CGIAR has explicitly redirected its mission toward sustainable poverty reduction... However... not enough [is] known about the processes and conditions under which agricultural technology can be an effective instrument for poverty reduction... TAC considers that it is important to rigorously establish causal linkages...*

*CGIAR Research and Poverty Reduction - TAC Commentary, 2001*

During the first decade of this century the CGIAR and many other institutions carried out studies to better understand how agriculture could reduce poverty. But the next big step forward came from outside the CGIAR.

In 2008, the World Bank produced a comprehensive 386-page analysis of new trends in agriculture, probably the most authoritative study ever developed on this subject. The study was the 2008 World Development Report on ‘Agriculture for Development.’ I would like to quote from the summary:

*“The world of agriculture has dramatically changed since the 1982 World Development Report on agriculture. An emerging vision of agriculture for development redefines the roles of producers, the private sector and the state. Production is mainly by smallholders, who often remain the most efficient producers, in particular when supported by their organizations. The private sector drives the organization of value chains that bring the market to smallholders... The state... corrects market failures, regulates competition... and supports the greater inclusion of smallholders and rural workers. In this emerging vision, agriculture assumes a prominent role in the development agenda.”*

World Development Report 2008: Agriculture for Development (Overview)

Implementing this vision, the World Bank’s Policy Objective number one in agriculture-for-development became, “Improve access to markets and establish efficient value chains.”

Of course, this idea is not new. In fact, one of its biggest successes had already taken place, right here in India. Over the period 1965-1996 Dr Verghese Kurien led India’s White Revolution, organizing more than ten million smallholder dairy farmers across 81,000 cooperatives into a modern, efficient “national milk grid”. The grid reached 250 million consumers and transformed India into the world’s largest dairy producer. India’s per capita milk production more than doubled, and cooperative members’ incomes and milk consumption rose significantly. Dr Kurien’s outstanding contribution earned him the World Food Prize in 1989. He became fondly known as the Milkman of India.

But such lessons had been largely overshadowed by the Green Revolution during the same time period. The World Bank study helped to refocus global attention on market-oriented development. It articulated the “causal linkages” between agriculture and poverty reduction that the CGIAR’s TAC had called for eight years earlier. It was now time to act on this knowledge.

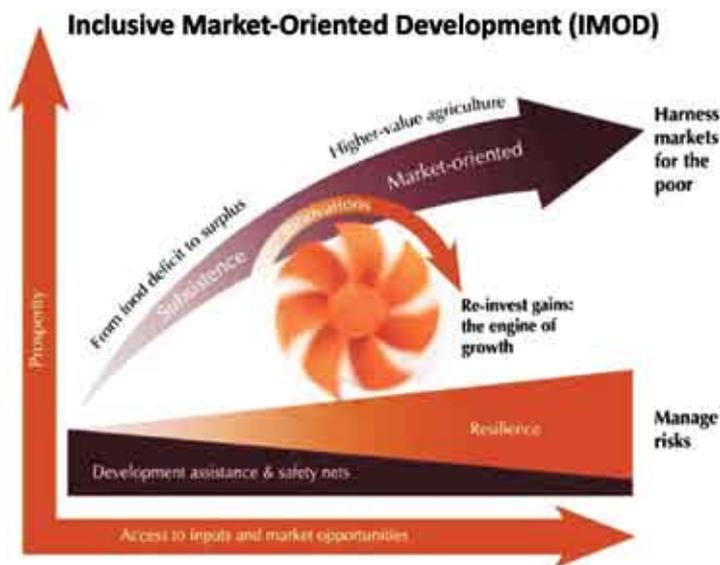
In this context of change, we at ICRISAT were seeking a new strategy for the decade 2011-2020. During 2010 we organized major brainstorming sessions in each global region where we work. We consulted both staff and a wide range of partners and stakeholders.

In all these consultations, an insistent theme arose – that to escape hunger and poverty in the drylands, smallholder farmers needed to have better connections to markets. Since this theme seemed to be globally important, we decided to make it the centerpiece of our new strategy. We called it IMOD, for Inclusive Market-Oriented Development.

## **What is IMOD?**

I want to begin with our diagram of IMOD to give the big picture.

The first element I'd like to point out in this diagram is the big bold curve leading to the right. This curve represents **harnessing markets specifically to benefit the poor**, carrying them from impoverished subsistence farming to prosperous market orientation. Conventional value chains don't have this focus on the poor. Without this focus, larger-scale farmers and wealthy middlemen tend to capture most of the market opportunities.



Underneath the big curve in the diagram is the rotating wheel. This is the “**engine of growth**” that increases the incomes of the poor. The “fuel” of this engine is **innovations designed for the poor**. These are quite different kinds of innovations from those found in conventional value chains, which favor the large farmer and the wealthy. Including the poor also requires new kinds of partnerships.

The third major element of IMOD is managing the risks that poor people face. This is at the bottom of the diagram. Risks are especially high for smallholders, because they have few resources to fall back on if something goes wrong. Diversification is essential for risk management. For the very poorest, risk management requires outside help through development assistance such as subsidies, emergency food reserves, NGO aid and other safety nets. As their incomes increase through IMOD, smallholders become more and more able to stand on their own; that is, they become more resilient.

### IMOD versus Value Chain

I am sometimes asked, “How is IMOD different from a value chain approach?” My short answer is, the “I”. **IMOD’s explicit goal is to include the poor** in value chains. This requires major innovation and needs to be highlighted. Conventional value chain innovations tend to deliver more benefits to the non-poor.

### IMOD is a Dynamic Development Pathway

Before IMOD, we segmented farmers into different categories, such as very poor subsistence farmers, versus progressive farmers. We didn’t pay much attention to

helping farmers **move** from the subsistence category to the progressive category. Instead, we just developed specific technologies for each category. The system was ‘static.’ Poor farmers remained poor.

IMOD changed this static thinking. IMOD is a process of **movement along a development pathway** from impoverished subsistence farming, to prosperous market-oriented farming. This movement is what we mean by the word ‘dynamic’. The dynamic nature of IMOD changed our thinking in fundamental ways. It compelled us to put priority on innovations that would **move** farmers from poverty to prosperity, instead of innovations that would leave them only a little less poor.

These are a lot of concepts. To make them more concrete, I’ll describe some important cases of IMOD success by ICRISAT and its partners.

### **Escaping subsistence farming: Microdosing and small seed packs**

Before IMOD, the CGIAR’s focus was on achieving maximum yields of staple grain crops. We knew that if farmers used high rates of fertilizer, irrigation and improved varieties their yields could increase three to five times. We bred for higher and higher yield potential, even though Norman Borlaug pointed out many years ago that “*farmers can’t eat potential*”.

The problem that Dr Borlaug alluded to was that poor farmers couldn’t afford high rates of fertilizer and irrigation, especially in Africa. Fertilizer prices rose sharply following structural adjustment in the early 1990s. Irrigation infrastructure was scarce in the drylands, and seed systems needed improvement. Without these inputs, the improved varieties could not express their high yield potential on-farm.

Before IMOD changed our thinking, we simply accepted that the poorest farmers were not going to benefit from fertilizer and irrigation – because they couldn’t afford it. So we focused on other objectives like stress resistance that gave much smaller gains.

These farmers would be a little better off, but still poor. This is the static development model. Now, IMOD gives us a way to get past this poverty roadblock.

Our research had informed us that smallholder fields are usually nutrient-deficient, so that even a small amount of fertilizer would generate a large and profitable response from the crop. Research found that even applying just one-sixth of the recommended rate of fertilizer resulted in 50-100% yield increases. We studied the physiology and economics of this microdosing system using crop models and they indicated that, contrary to conventional wisdom, low rates of fertilizer are not overly risky. With low rates, crops don’t become too leafy and run out of water before maturity. On the contrary, these low rates of fertilizer cause plant roots to grow faster and more extensively, and make the plants more drought-hardy.

We realized that if farmers started off with low fertilizer rates, and if they were supported by effective technologies and institutions, the profits could propel them ahead the following year. Year after year they could use increasing profits to improve their family's living conditions, increase their fertilizer rates, buy improved seed, and improve other management practices.

This virtuous cycle of increasing investment and increasing rewards, is what we mean by **dynamic development that progresses along the IMOD curve from a state of poverty, to a state of prosperity.**

How do we help farmers re-invest their profits to drive this virtuous IMOD cycle? In West Africa we work with FAO to develop a loan system called 'inventory credit' (in French: warrantage). Farmers put part of their harvest in community storage and sell it just before the next planting season, when prices are high. The warrantage associations buy fertilizer and other inputs at good prices for their member-farmers. In Eastern and Southern Africa, other organizations such as the National Association of Smallholder Farmers of Malawi (NASFAM) play a similar role. In India, the government plays a major role by subsidizing fertilizer, supporting crop prices, and by providing strong research-for-development services.

The uptake of microdosing has been strong. We estimate that 400,000 farmers on both sides of the African continent are currently testing or adopting it. What they often tell us is that **they would like to buy more fertilizer if they could.** That is a vital sign of progress along the IMOD development pathway! Microdosing is motivating farmers to increase their investments and adopt more innovations from one year to the next.

As fertilizer use increases, so does the yield response by improved varieties. This is a strong IMOD dynamic. So, with strengthened donor support in recent years we've been encouraging both microdosing and improved seed across Africa. Just as micro quantities of fertilizer are more accessible to the poor, so are small-sized packets of improved seed; these are much in demand by the poor wherever we've tested them, especially by women for their home gardens and field crops, which in turn impact the nutrition of their families.

State powers up its agricultural engine

Government can ignite the IMOD engine, too. An initiative called Bhoochetana (Land Rejuvenation) is helping four million dryland farm families in Karnataka state, India, to boost yields by 30% on 3.7 million ha. A major method is by overcoming micronutrient deficiencies through targeted fertilizer dissemination and other soil and water management interventions. The economic benefits during the 2011 rainy season alone were US\$ 130 million, returning 14 dollars for every dollar invested by the state.

## **A watershed achievement**

Insufficient water is the defining constraint of the drylands. Yet much water is either wasted or allowed to flow by without being used. Improved water control is IMOD-strategic, because it reduces drought risk for the poor and it enables the cultivation of more diverse, higher-value, nutritious crops such as vegetables and fruits.

Effective partnerships with national and local agencies have improved watershed productivity and diversity through smallholder community action, benefiting 2.4 million farmers (12 million people in farming households) in India, China, Thailand, Vietnam and in several West African countries. In Asia, net crop income doubled on average, and cow milk yield has risen from 1.5 to 4.0 liters/day. Returns to investment in Andhra Pradesh state, India, alone have been US\$608 million over the past decade.

## **Revitalizing the value chain for rainy season sorghum in India**

Rainy-season sorghum is a US\$690 million smallholder crop in India. It is used for cattle and poultry feed, processed foods and alcohol. We and our partners assessed the sorghum IMOD chain and found major weaknesses in grain grading, linkages to input and credit agencies, and marketing outlets. To overcome these constraints we:

- Facilitated their grouping into farmer associations so they could link more effectively to input and credit suppliers and become more empowered in market negotiations;
- Bred and disseminated better-quality cultivars;
- Trained farmers in integrated crop management; and
- Helped farmers improve their on-farm storage of grain.

As a result of these combined interventions, sorghum grain and fodder yields rose by 25-50% for the participating farmers. Income per hectare from the improved sorghum crop has nearly doubled, from \$162/ha to \$365/ha.

## **The chickpea IMOD engine**

IMOD dynamics have sparked chickpea revolutions in India and in Myanmar, as well as in Ethiopia.

Originally a crop of the cooler, more moist latitudes of northern India, chickpea has, by virtue of the last twelve years research-for-development, adapted to hot, dry tropical conditions. Early-maturing, heat-tolerant kabuli grain varieties, mechanization of field operations through hourly contracting of tractor services, strengthening of formal and informal seed production, awareness and training programs, growing markets

(domestic and export), and cold storage (achieving better prices and seeds for next season) have all played a major role. These innovations have sparked 50% increases in yield (from 600 to 900 kg/ha), a threefold increase in chickpea area (from 0.47 to 1.5 million ha) and a 4.8-fold increase in production (0.28 to 1.35 million t).

The kabuli chickpea IMOD revolution in Myanmar has been no less dramatic. Myanmar re-initiated exports of chickpea in 2001 following two decades of almost no export earnings from the crop. During the 2001-10 decade, Myanmar exported an average of 50,000 tons annually, worth \$22 million. Chickpea production increased four-fold (117,000 to 467,000 tons) due to a doubling of sown area (164,000 ha to 332,000 ha) and a doubling of grain yields (712 kg to 1.40 tons per ha).

Africa is also benefiting from the chickpea boom. Germplasm-sharing and capacity-building assistance from ICRISAT to Ethiopia-EIAR contributed to major chickpea production gains in the East Shewa Zone of Oromia and Amhara regions, benefiting nearly one million farm households. Yields increased by 75% to 1.4 tons/ha from 2003-05 to 2010, and national production increased by 136% to 402,000 tons from 2003-05 to 2012. About a quarter of the crop is exported; export earnings increased 21-fold, to \$21 million per annum from 2005 to 2010. Models predict that these gains will lift at least 0.7 million people out of poverty during 2001-2030.

## **Groundnut gains through IMOD**

### **India**

The world's largest groundnut producing district is in Anantapur, a drought-prone district of Andhra Pradesh state, India. More than 70% of the cultivated area in the district (about one million hectares) is sown to this crop because of its ability to survive long dry spells, and for its cash value. The crop is in demand both for oil and food uses. It is also valued as a source of fodder for livestock during dry years when other crops fail.

The variety ICGV 91114 created a new beginning in 2006. Bred and developed at ICRISAT, it features higher yields, earlier maturity, drought tolerance, high shelling turnover, high oil and protein content, and good palatability and digestibility of haulms by livestock. It increases pod yield by 23% on average. Net income to adopting smallholders has increased by 35%, worth \$110 extra US dollars per household. Cows fed with the haulms (vegetative biomass) of this variety produce 11% more milk. Its drought tolerance has reduced yield variability by 30% compared to TMV 2 (an earlier variety).

Farmer associations were formed to produce seed of ICGV 91114, enabling it to spread. ICGV 91114 occupied about 3% of the Anantapur groundnut area by

2010, annually contributing an additional 42,000 tons of groundnut worth US\$3.7 million to 30,000 farm households (150,000 people). Assuming 35% adoption by 2020, these benefits will rise to \$500 million annually.

## **Malawi**

The 100,000 member-strong National Smallholder Farmers' Association of Malawi (NASFAM) called on ICRISAT's help in rekindling its groundnut export industry. The high-yielding ICRISAT-bred variety CG-7 now accounts for half of the national groundnut production. ICRISAT assistance in training and technology transfer for aflatoxin management, testing and certification has reduced contamination by this cancer-causing toxin sufficiently to allow groundnut exports to the UK. Stimulated by these successes, groundnut production grew at an annual rate of 7.5% per annum during 2002-2011.

## **Pigeonpea's quickening pulse in Africa**

Pigeonpea is in high demand in India and worldwide. Pigeonpea has long been grown in Africa, but mostly on a household garden level or as a subsistence intercrop with maize. A concerted IMOD effort in Tanzania has invigorated pigeonpea production for cash export from Tanzania. Fusarium wilt-resistant, seasonally-adapted, export grain quality varieties have been adopted on 45% of the crop's area (double from five years ago) in northern Tanzania, producing an additional 1.3 tons per hectare or 33,000 total extra tons – delivering approximately US\$33 million in extra value to impoverished farmers while improving soil fertility and farming system resilience.

## **Goat platforms**

Innovation platforms provide a channel for pro-smallholder innovation in value chains. They have doubled the prices received by smallholder goat keepers, particularly women, in southwestern Zimbabwe. The platforms established smallholder-friendly auctions offering fairer market prices to the poor. They also improve dry-season feed and fodder supplies, greatly reducing goat mortality.

## **Hybrid fuel for the IMOD highway**

Access to improved seed is a major speed bump along the IMOD pathway. Developing hybrid varieties of crops is important in overcoming this obstacle, because it provides an incentive for seed companies to invest in crop improvement and seed dissemination. To foster hybrids, ICRISAT catalyzed the formation of the Hybrid Parents Research Consortium (HPRC) in India. HPRC currently consists of 36 private seed companies that provide nearly a million US dollars in research and

knowledge-sharing funding annually. HPRC enhances the availability of hybrid seed to smallholder dryland farmers across the country. Nearly 60% of the hybrid sorghum and 80% of the hybrid pearl millet sold by seed companies in India today derives from ICRISAT germplasm.

## **Incubating IMOD**

The Agribusiness and Innovation Platform (AIP) of ICRISAT is a public-private partnership model that fosters innovative agri-enterprise to bring R4D innovations of ICRISAT and partners to the marketplace for IMOD impact. It has attracted US\$5.5 million over the past four years including support for 108 joint ventures. For example through its NutriPlus initiative, AIP incubates partners that develop, test and market innovative processed food products from staple grains that can increase incomes for smallholders.

## **Conclusions**

I hope this brief global tour has impressed upon you the fresh excitement and wide range of innovation that IMOD is bringing to the work of ICRISAT and partners.

A strategic framework is like a lantern in the night, providing vision in the darkness. It guides our work along the path that leads to our most cherished goals. It prevents us from going astray, and helps us to better help the poor to fulfill their deepest aspiration – not just to be less poor, but to escape poverty altogether. That is the purpose of IMOD.

IMOD gives us many gifts. It causes us to look at old problems in new ways, and to look for new and innovative solutions. It leads us to renew and enlarge our partnerships. It broadens our awareness, causing us to consider how farming fits into the larger framework of society. It gives us a clear logic for uniting socio-economic and biophysical research. It reminds us that smallholder farmers need markets, and markets need smallholder farmers. It insists that we must consider risks as well as rewards. It makes clear that development is a dynamic process, not a static event.

IMOD prompts us to go far beyond just increasing yield potential. It requires that we measure the actual value that our innovations bring to the lives of the poor. At the end of the day, that value is what matters most to us.

Thank you!

## Recent TAAS Publications

- Public-Private Partnership in Agricultural Biotechnology - Second Foundation Day Lecture, delivered by Dr. Gurdev S. Khush, Adjunct Professor, University of California, Davis, USA, October 17, 2005.
- Farmer-Led Innovations for Increased Productivity, Value Addition and Income Generation - Brainstorming Session, October 17, 2005 - Highlights & Recommendations
- Strategy for Increasing Productivity Growth Rate in Agriculture" - Strategy Paper by Dr. R.S. Paroda, August, 2006.
- Brainstorming Session on "Models of Public-Private Partnership in Agricultural Biotechnology ", April 7, 2007 - Highlights & Recommendations.
- National Symposium on Quality Protein Maize for Human Nutritional Security and Development of Poultry Sector in India and Presentation of the Third Dr. M.S. Swaminathan Award for Leadership in Agriculture, May 3, 2008 –Proceedings and Highlights.
- Overcoming the World Food and Agriculture Crisis through Policy Change, Institutional Innovation and Science– Fourth Foundation Day Lecture, delivered by Dr. Joachim von Braun, Director General, International Food Policy Research Institute, Washington, March 6, 2009
- Brainstorming Workshop on “Emerging Challenges before Indian Agriculture - The Way Forward”, March 6, 2009 - Proceedings & Recommendations.
- Brainstorming Workshop on 'Strategy for Conservation of Farm Animal Genetic Resources' 10th – 12th April, 2009 – Ranchi Declaration.
- Brainstorming Workshop on “Climate Change, Soil Quality and Food Security”, August 11, 2009 – Proceedings & Recommendations.
- Millions Fed: Proven Successes in Agricultural Development, January 19, 2010 (Translation in Hindi jointly published by IFPRI, APAARI and TAAS)
- National Seminar on “Quality Seed for Food Security through Public-Private Partnership”, April 13-14, 2010 – Proceedings & Recommendations
- TAAS Foundation Day Lecture on “Climate Change and Food Security: From Science to Sustainable Agriculture” by Dr. Mahendra M. Shah, May 7, 2010
- NSAI Foundation Day Lecture on “Revitalizing Indian Seed Sector for Accelerated Agricultural Growth”, October 30, 2010
- Brainstorming Session on Prospects of Producing 100 million tons of Wheat by 2015 and presentation of Fifth Dr. M.S. Swaminathan Award for leadership in Agriculture - Proceeding & Highlights December 18, 2010
- National Dialogue on Building Leadership in Agricultural Research Management, Hyderabad, August 27 - 28, 2010 - Proceedings & Recommendations
- Stakeholders' Interfae on GM Food Crops, May 19, 2011 - Recommendations
- TAAS Foundation Day Lecture on “Harnessing Knowledge for India's Agricultural Development” by Dr. Uma Lele, August 12, 2011
- The Sixth Dr. M.S. Swaminathan Award Lecture on "Challenges and Opportunities for Food Legumen Research and Development" by Dr. M.C. Saxena, January 25, 2012
- Proceedings and Recommendations of Farmers' Led-Innovation. December 23-24, Hisar, Haryana, 2011
- Proceedings and Recommendations of Global Conference on Women in Agriculture. 13-15 March, 2012 New Delhi; India.
- The Seventh Foundation Day Lecture on "Ensuring Food and Nutrition Security in Asia: The Role of Agriculture Innovation" by Dr. Shenggen Fan, DG, IFPRI. January 11, 2013
- A Brief Report on Seventh Dr. M.S. Swaminathan Award presented to Dr. William D. Dar, DG, ICRISAT, Hyderabad. June 24, 2013

