

# **Global Encounter-India Food Systems and Agribusiness- Making a Difference**

## **Individual Written Responses to Questions Related to the Topic**

Procedure used to generate this document:

This document represents the summary of responses individuals wrote to questions related to their self-selected area of interest/expertise within these topic areas (Education; Environment; Food Systems and Agribusiness; Gender, Poverty and Social Inequalities; Health; and Technology and Economic Development). All responses received are included and are typed verbatim with some explanation of acronyms. There is no significance in the ordering of the topics or comments as presented in this report.

### **A. What are your current or future focused areas of teaching, research and/or outreach related to India?**

1.
  - Development of degrees, programs, products and services to benefit various sectors
  - These programs will utilize some level of technology/on line delivery.
2.
  - PFID-F&V and planned work by CANR/IIA focuses on research and outreach re: fruits and vegetables, associated value chains and how development efforts can improve the lives of small farmers in Maharashtra, Tamil Nadu, and Karnataka. Efforts include plans to collaborate/link with local universities and to include women and other marginalized groups.
3.
  - Like to see changes and new things emerging to bring about more efficiency and better health of the producers and consumers.
  - I was associated with modernization of the rice milling industry which increased the availability of rice by 10% in 1965 and gave us some very useful byproducts e.g. rice bran, rice oil, rice husk for insulation or food. Also loss by pests can be reduced

4.
  - Currently working on biofuels production (ethanol and biodiesel) in India. I look at farm income impact, agricultural structural changes, etc.
  - Outreach – I might be able to communicate with research institutes (Indian Statistical Institute), Universities (Annamalai University and Tamil Nadu Agriculture University.)
5.
  - Current: None
  - Future: Animal Science (production, management, sustainability, nutrition, microbiology, health)
  - Develop course in international livestock production, including India.
6.
  - Poultry – mainly Coturnix (Japanese quail) production, education, extension, etc. in India, especially with the Tsunami victims
7.
  - PFID (Partnership for Food Industry Development) – Mango Market Development Project – USAID funded 2004-07
    - based in Maharashtra, but additional partnerships in Delhi and Tamil Nadu
    - building capacity in Fruit and Vegetable grades and standards; facilitating policy development w/ Government of India partners; developing market linkages
  - USDA Strengthening Agricultural Marketing Systems (SAMS) (funded by USAID)
    - Working as a part of USDA – CSREES and Agricultural Marketing Service (AMS) team in partnership with National Institute of Agricultural Marketing (NIAM) in Jaipur on Ag grades and standards and marketing in Rajasthan, Himachal Pradesh and Karnataka
  - I am responsible for Good Agricultural Practices training modules and Grades and Standards.
8. Research focused on various elements of market development of food products (innovations)
  - Conducting training sessions/workshops on market development
9. **\*\*NO RESPONSE\*\***
10.
  - Evaluation of Agriculture and Environmental Programs
  - Marketing of processed food
  - Development of state agriculture universities to address the needs of 21<sup>st</sup> century India
11. **\*\*NO RESPONSE\*\***

**B. What resources (existing at MSU or working in collaboration with MSU) should be considered as the University moves forward on any and all work related to India?**

1.
  - Economic Development Resources
  - Use of technology to facilitate distribution/ outreach of research, programming and services
2.
  - Resources related to grant writing and faculty coordination can be focused on research and outreach RE: Indian Food Systems and associated trade efforts.
3.
  - Have a source of information and publicity both in USA and India, a clearing house of information representing the work by MSU.
  - This centre could also collect information from India in regards to problems being faced there or in dealing with growing trade.
4.
  - Graduate Students – when they work on a project relating to the U.S. they might go that extra mile of evaluating their analysis in India or anywhere else in the world.
  - Information technology – Web-based classes to enroll students in other countries
  - Internet access is still a challenge in many colleges/ universities in India. Can MSU help them with such issues? It costs money!
5.
  - Funding for/ mechanism for Indian grad/undergrad students to matriculate at MSU
  - Commitment of MSU/CANR to reward, provide incentives for faculty to engage in India activities
6.
  - I just facilitated a university linkage between MSU and KAU (Kerala Agricultural University) of Kerala, India and have these needs:
    - resources for community development, youth development, and women in development
    - resources for faculty (3 people) from KAU to visit short term at MSU
    - also need funds for my travel, research, and outreach in India
    - student exchange and visit to both universities.
7.
  - PFID (Partnership for Food Industry Development – Fruits and Vegetables) and Institute of International Agriculture (IIA) must have support sufficient for maintenance of infrastructure to compete for and deliver funded projects.
  - This includes staff support, accounts management and even support in coordinating and writing grants.
  - Most of this can be self-supporting through grants, but bridge funding is sometimes necessary.
  - Central office (or distributed offices with project partners) in India

- Maintaining a constant presence IN COUNTRY is essential to facilitate future opportunities.
  - Facilitate mechanisms for bridge funding/ release time for faculty to engage.
8.
    - Facilitated discussions, (e.g. knowledge communities) on specific topics relevant to India
    - Allocate funding for strategic initiatives in India.
    - Identify one or more faculty who would receive released time to “drive” the India Initiatives.
  9. **\*\*NO RESPONSE\*\***
  10.
    - Support faculty travel, summer salaries, and time spent working in International projects.
    - Count international work in promotion and tenure policies with equal weight to teaching/research.
    - Encourage faculty to seek funding for their work from various Indian NGOs or foundations.
  11. Dr. Lawrence Drzal in MSU- Bio Composites lab has developed technologies requiring flax or hemp jute as raw material.

**C. What are the top three to five things that MSU should be doing in regard to this theme/area of concern in India over the next five to ten years? How would we know that we had been successful?**

1.
  - Supporting and rewarding faculty collaboration across research, program and services areas
  - Working with appropriate Indian partners (universities and others) to jointly develop programming and services
  - Expansion and enhancement of how “resources” are shared
  - Support and direction from top-level administration and units at MSU in order to have sustained collaborative programming efforts
  - Success would be “visible” through the number of sustained collaborative efforts created, and the number of additional opportunities that are created as a result of these collaborations.
  - Additionally, innovation in this area can be tracked (i.e. the number of firsts) and by the measurable “impact or outcomes” of the various projects.
  - An early example of this collaboration within MSU is the Global Food University (GFU) concept that is currently being explored. GFU involves collaboration across programs, institutes, departments, and colleges to more effectively partner, create, distribute and market programs.

2.
  - Coordinate effort across departments that address food systems in India with an emphasis on including small farmers and market demands/concerns.
  - Share information re: ongoing teaching, research, and outreach re: India food systems among MSU faculty and staff working on these issues.
  - Identify and prioritize "preferred partnerships" with Indian institutions working on food industry issues, e.g. Tamil Nadu Agricultural University, the Agricultural and Processed Food Products Export Development Authority (APEDA) in India, etc.
  - Bring Indian students, scholars and professors working on these issues to MSU and facilitate MSU professors and students spending time abroad at Indian universities and other institutions especially "prioritized partners."
  - Integrate social inclusion themes throughout - rural poor, ethnic groups, women.
  - Provide resources related to grant writing and faculty coordination that can be focused on research and outreach.
  
3.
  - Select areas of work needing research like improving productivity.
  - For example, can the water from the process of biogas production from cow-dung be used in agriculture? (Indian farmers need work on practical problems, not just talk.)
  - Locate an agency to work with India on selected subjects.
  - Evaluate the work done and publicize to get public participation in both U.S. and India.
  
4.
  - Encourage graduate student research on Indian topics. For example, in our Agricultural Economics department, many tend to work on 3 essays for their Ph.D. dissertation. For instance, all the three essays are on the U.S. ethanol industry in my dissertation. I suggest that two could be related to the U.S. and the third essay could be done on a foreign country. That way, MSU will have more research work done on India or other countries. It is relatively easy as the methods are worked out for the U.S. and it is a simple extension to other countries in many cases.
  - Many memorandum of understanding by the universities might go unnoticed after a period of time. Go beyond "signing" and work to effect data transfer through low cost means, including the internet. We need to know how the MOU works on the other side of the agreement.
  - MSU has developed technologies/patents. I know of a Michigan business importing huge tanks (and technology) from India for their operations.
  - Can MSU sell/promote selling their technology to Indian entrepreneurs? For example, can MBI in Lansing sell MSU's Ammonia Fiber Explosion (AFEX) technology for cellulosic ethanol production to an Indian energy company?
  - Impact of foreign direct investment on local producers and local food systems in India

5.
  - Animal science (as part of broader ANR/CVM engagement) in India
  - Food Safety and Infectious Disease
  - Animal production sustainability/ environmental issues
  - International trade – (free trade)
  - Successful benchmarks: Increased student numbers, increased grants, faculty exchange, cultural activities, MOU's
  
6.
  - My last two visits to Kerala were to evaluate and assist Tsunami victims. They failed in the quail production since they did not have their own houses. They were all living in shelters, but now they all have new houses and space for small animal production.
  - Work with outreach in Tamil Nadu and Kerala through Kerala Agricultural University
  - Bring in 3 faculty members (nutritionist, poultry specialist, and extension specialist) who all worked with Tsunami victims for short term visit to MSU and the Animal Science Department.
  - Both undergrad/ graduate students to visit each others universities
  - Graduate students from India should be given in-state tuition and a 20 hrs/week work permit to start the first year or semester at MSU.
  
7.
  - Agriculture Development – 60% of workforce in India is engaged in agriculture. Agriculture is a major focus of donor agencies. This has profound implications throughout Indian society.
  - Related to this – strengthen agricultural marketing
    - This includes improving grades and standards and building higher value market linkages both domestic and export.
  - Build capacity in Indian institutions to partner in and ultimately lead these efforts. Focus is still primarily on production in India at present. This needs to transition more fully to market-led agriculture.
  - Fostering agriculture value chain development/ value addition/ etc. requires lots of infrastructure and expertise in this sector.
  
8.
  - Identify the key institutions (academic, trade, government, NGOs) with whom we will partner on academic programs, dual degrees, etc.
  - Form interdisciplinary teams to address agribusiness/ food systems problems.
  - Better coordinate across units on topics of common interest.
  - Increase our coordinated research, teaching, outreach programs in India.  
Metrics of success:
    - More strategic student recruitment (e.g. not engineering and business)
    - Improve our Indian alumni database and network with alumni in India.
  - Metrics of success:
    - Increase in external funding
    - Increase in the number of dual degree/ joint academic programs

9.
  - Dr. Lawrence Drzal in MSU Bio Composites lab has patents and technologies for production of bioplastics, etc.
  - Would MSU and his company be willing to consider investing in India?
  - Advantage: India has cheap raw material and cheap labor.
  - Can MSU sell their technology/patent on a most favored nation (MFN) basis?
  - How can MSU establish ties with Indian or Chinese Manufacturing sector or industry?
  - How can MSU be part of Michael Porter's 'CLUSTERS' to be formed in the new Global Economy, especially outside of the U.S.? **Note:** Michael E. Porter leads the Institute for Strategy and Competitiveness at Harvard Business School and defines clusters and cluster development:  
"Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region. Clusters arise because they increase the productivity with which companies can compete. The development and upgrading of clusters is an important agenda for governments, companies, and other institutions. Cluster development initiatives are an important new direction in economic policy, building on earlier efforts in macroeconomic stabilization, privatization, market opening, and reducing the costs of doing business."
10.
  - Establish and strengthen network/ relationships with agricultural universities and research organizations in India.
  - Plan and implement innovative collaborative projects/ programs to benefit both parties (MSU and Indian institutions). Examples: Water, environment, housing, food marketing.
  - Start an "Administrator – cum faculty exchange" program funded through grants.
  - Engage in joint research/ outreach projects – allow MSU faculty flexibility to plan such projects through use of MSU funds.
  - Impacts could be
    - quality of linkages developed
    - joint scientific publications
    - financial gain, etc."

11. \*\*NO RESPONSE\*\*

#### **D. Additional Comments**

1. \*\*NO RESPONSE\*\*

2. \*\*NO RESPONSE\*\*

3. \*\*NO RESPONSE\*\*

4.
  - What steps are needed to use “the low-cost labor force” in India – to test/apply the technologies developed in MSU?
  - How can we involve industry and non-academic personnel in India such as central and state governments, non-profit organizations? I met with one retired government personnel during that Global Encounter series. He and others like him have contacts in India and may be willing to link MSU with Indian universities as well. How can we get the non-academic participants who might be targeted by MSU to assist? For example, there may be some need for field level trials and they could be evaluated at a different global location – like field trials for a corn or soybean variety developed at MSU. It would require considerable amount of quarantine, etc. – non-academics in India would be of use in this case.
5.
  - How to get colleagues to “buy into” commitment/ investment of effort, given economic situation
  - MSU needs to promote, provide incentives (awards) to support faculty for international activities.
6.
  - MSU students could visit Kerala Agricultural University for a semester and should be given incentives.
7. **\*\*NO RESPONSE\*\***
8. **\*\*NO RESPONSE\*\***
9. **\*\*NO RESPONSE\*\***
10.
  - India is a diverse country. MSU may be better off to work in collaboration with select universities or research centers in India.
  - We need to have a common understanding on: Why do we want to engage in India?
11. **\*\*NO RESPONSE\*\***

**This material was generated from Global Encounter-India, <<http://www.isp.msu.edu/globalencounter/india>>, held at Michigan State University on September 22, 2006. This interactive and participatory event was designed to obtain input and to elaborate in a country-specific forum on relevant themes, opportunities, issues, and opportunities affecting MSU's current and future engagement in India and to a lesser degree southeast Asia.**