

**SUMMARY OF THE FSN FORUM DISCUSSION**  
**“TOPICS ON WHICH RESEARCH IS MOST NEEDED”**  
**FROM 12<sup>TH</sup> NOVEMBER TO 7<sup>TH</sup> DECEMBER 2007**

**I. TOPICS WHERE RESEARCH IS NEEDED**

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- Improvement of the food production performance of lesser known crops (C. Lagu, A. MacMillan & P. von Hartmann)
- The impact of climate change on FSN and livelihoods, especially in terms of adaptation for the subsistence farmer. (C. Lagu & A. MacMillan, J. Mambo, C. Ahmadou Lo)
- New foundations for truly sustainable agriculture and research on how to equip rural communities to ensure their food self-provision in general, e.g alternative technologies (including labour saving ones) for improved production or water efficiency, subsistence farming, etc. (C. Lagu & A. MacMillan, J. Mambo)
- The importance of nutrition as a mitigation measure in the AIDS pandemic and HIV infection, in the context of subsistence farmers and the rural population (J. Mambo)
- Peri Urban Agriculture in general and emerging new forms of urban agriculture and their impact on food security and nutrition (S. Abbasi, A. MacMillan)
- Globally measure the real impact of food aid and the impact of irrigating dry regions with canals to improve water access and irrigated agriculture (C. Ahmadou Lo)
- Gradation of factors responsible for higher life expectancy (P. Dutta)

**II. OTHER ISSUES/ GAPS**

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- Lack of serious evaluation and empirical evidence supporting FAO's FSN programs (B. Davis)
- Importance of a balanced and varied diet and dangers of relying too heavily on a single food source (MC Dop)
- Income generation in order to improve access to food is more important than one single seed (P. Dutta)
- Decline in food per person (J. Sherman & A. MacMillan)
- Land and water scarcity (A. MacMillan, C. Lagu & S. Abbasi)
- Food aid is but a short term solution to solving hunger and malnutrition in poor countries (J. Mambo)
- Perception of funding of food security by decision-makers and international bankers as a form of “welfare” rather than a highly viable area for investment - thus FSN programmes continue to be seriously under-resourced (A. MacMillan)
- The role, contribution and coordination of different partnerships in the management of FSN in sub-Saharan African. (F. Imaikorit Oumo)
- Inefficient knowledge management/communication of successful experiences/practices and thus limitation in building upon them in other contexts or on a larger scale (J. Teff, F. Imaikorit Oumo)
- Lack of attention to monitoring and learning system for FSN security (J. Teff)

### III. APPROACHES TO SOLVE GAPS

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- Necessity of improving awareness (in FAO in particular) about the importance of research and evaluation to FSN programmes/projects and greater collaboration between researchers and program officers (B. Davis)
- Necessity of focusing on quality, nutrition and food safety (not just in agriculture) and the nutritional quality of organic produce (S. Mehta)
- Detailed diagnosis of the coping mechanisms of poor communities should precede any prescription for addressing food insecurity (M.D. Mfanimpela)
- New and proven technologies should blend with valuable indigenous knowledge systems in order to enhance community resilience and viability (M.D. Mfanimpela)
- Analysis of both food production and income generation as factors to guarantee food security and sustainability for small-holder farmers (M.D. Mfanimpela)
- Interventions to be focused as a sustainable development and not just a relief measure with a multi-sectoral dimension: structural, systematic and policy-related (M.D. Mfanimpela)
- To tackle climate change in Africa, new ways for water access by developing irrigation systems should be considered, especially in Sahel region (C. Ahmadou Lo)
- Establishment and sustainable management of community information centres to tackle the lack of community memory and point of reference (F. Imaikorit Oumo)
- Develop a "**experiential monitoring and learning system**" for FSN security, meaning a systematic and integrated way to monitor field level activities, to consolidate, analyze and distil lessons, to reformulate and retest in different conditions and then to go to scale with the factors that have been identified as criteria for success. This may contribute to establishing the evidence of what works and what does not, helping to build an institutional memory of innovative, credible and successful interventions. (J. Tefft)
- Invest more in developing and disseminating results of effective processes that achieve the desired results. (J. Tefft)
- Strive for a better understanding of the manner in which political, institutional and governance factors condition incentives and affect the behavior of the large diversity of actors involved in development (J. Tefft)

**Good practices:** National Food Policy Capacity Strengthening Programme (NFPCSP), Bangladesh (<http://www.nfpcsp.org>). The project aims to expand and deepen the capacity of civil society to conduct high quality research on food security and support effective dialogue between policy makers and researchers (L. Bhattacharjee)

**Activities:**

- A participatory assessment of food security policy related research needs, outcomes available in a Bangladesh Food Security Research Needs Digest (RND) (<http://www.nfpcsp.org>).
- A Benchmark Survey (BMS) of literature relevant to FSN in Bangladesh, serving as a reference tool for both researchers and decision-makers in identifying FSN research gaps and priorities.
- The Research Grant Award Initiative to support socio-economic research on a broad range of food security issues and policies related to food availability, access, and utilization for nutrition, as well as cross-cutting issues such as gender, governance, environment and infrastructure.
- An evaluation of Research Institutions in the field of FSN research.

### **Questions (to be followed up in future discussions)**

- What are existing mechanisms or strategies to start research on the gaps that have been identified? (C Lagu)
- Do we need a combination of new approaches or new paradigms like the one of innovative cluster approaches? (for enhancement of competitiveness and progress) (C. Lagu)
- Our challenges within the Sub-Saharan Africa countries is multi-dimensional i.e. structural, systematic and policy related. Can we share experiences from other people who have developed some working models on this issue so that they can be adapted to our situation? (M.D. Mfanimpela)

### **Recommended Research areas for agricultural scientists in developing countries** **(contributed by G. S. Abbas)**

#### **Plant Sciences:**

1. Genetic improvement of crops especially through application of biotechnology and molecular biology
2. Epidemiology, diagnosis and control of emerging and re-emerging infections and pests of crops
3. Diversification of agriculture emphasizing horticulture, and livestock for improved farm profitability (farming system approach) return/farm/year
4. Integrated pest management models for cotton-wheat, maize-wheat, rice-wheat and horticulture systems and their field implementation, scaling out and scaling up strategies
5. Fate of pesticides and other pollutants in soil and food chain and its impact on human, animal health, and on environment
6. Reduction of post-harvest losses and improving product quality in field crops through improvement of farm equipment, facilities and methods
7. Farm machinery research focus on developing and improving machinery for planting, harvesting, grading and processing.

#### **Natural Resources:**

1. Prevention of soil degradation for sustainable ecosystem management, particularly dry lands
2. Improving water productivity under irrigated and rain-fed production systems
3. Sustainable management of rangelands
4. Apiculture for quality honey production / export and increased farm productivity

#### **Animal Sciences:**

1. Genetic Improvement of Animals (livestock, fisheries and poultry)
2. Epidemiology, diagnosis and control of emerging and re-emerging infections of animals – bird flu, foot and mouth, rinderpest, warble fly, etc.
3. Improving nutrition through better feed and fodder products
4. Inland aquaculture and fisheries development

#### **Social Sciences:**

1. Agricultural Production and Value Chains Vs Small-holders
2. Agricultural Growth and Poverty Reduction
3. Agricultural Policy Analysis (pricing, subsidy, incentives)
4. Globalization and International Trade
5. Technology Transfer and Impact Assessment
6. Capacity Building of Agricultural Scientist

## IV. REFERENCES

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- Nutritional Value of Hempseed: <http://www.finola.com/HempseedNutrition.pdf> (P. von Hartmann)