**FSN Forum:** **Policy outreach and communications - what works for improving food security and nutrition at the country level?**

**Contribution to: Stories and** **Recommendations** **“on how to improve the uptake and relevance of FSN information for decision making”**

**Note:**

1. **Submitted on September 20, 2014 to:** Email: FSN-moderator@fao.org
2. **Contributor:** Dr. Santosh Kumar Mishra (Ph. D.),Technical Assistant, Population Education Resource Centre (PERC), Department of Continuing and Adult Education and Extension Work, S. N. D. T. Women's University, Patkar Hall Building, First Floor, Room. No.: 03, 1, Nathibai Thackerey Road, Mumbai - 400020, Maharashtra, India. [**Email:** drskmishrain@yahoo.com **Institutional Web Link:** <http://sndt.ac.in/> **Tel.:** +91-022-22066892 (O), +91–022–28090363 (R), +09224380445 (M)]

**Section – I: Stories “on how to improve the uptake and relevance of FSN information for decision making”**

I am researcher & demographer employed with the Population Education Resource Centre (PERC), Department of Continuing and Adult Education and Extension Work, S. N. D. T. Women’s University (SNDTWU, <http://sndt.ac.in>), Mumbai, India, since August, 1987. My subject areas of interest include issues pertaining to population-development linkages. I suggest (on the basis of my academic and research experiences at the SNDTWU) that the FSN can learn **on how to improve the uptake and relevance of its information for decision making** from following successful stories:

**Story – 1: *Improving health information systems for decision making across five sub-Saharan African countries: Implementation strategies from the African Health Initiative:***

Weak health information systems (HIS) are a critical challenge to reaching the health-related Millennium Development Goals because health systems performance cannot be adequately assessed or monitored where HIS data are incomplete, inaccurate, or untimely. The Population Health Implementation and Training (PHIT) Partnerships were established in five sub-Saharan African countries (Ghana, Mozambique, Rwanda, Tanzania, and Zambia) to catalyze advances in strengthening district health systems. Interventions were tailored to the setting in which activities were planned. Brief description of country – wise data on project experiences on improving health information systems for decision making is presented below:

* **Ghana:** The Ghana PHIT Partnership (the Ghana Essential Health Intervention Project, or GEHIP), has two intervention strategies to strengthen the HIS and link information with improved health system operations. The first is to implement a simplified information capturing system as part of the District Health Information Management System (DHIMS-2) that focuses on essential information for district level planning, thereby reducing the reporting burden in primary care settings. The second is the adoption of a District Health Planning and Reporting Toolkit (DiHPART) for use by district health leadership to identify and allocate resources based on the district level burden of disease profile.
* **Mozambique:** The Mozambique PHIT strategy focuses on strengthening the MOH’s established HIS through applying innovative approaches to improve HIS quality and foment its use for resource allocation, program monitoring, and service delivery improvements at the facility, district, and provincial levels. The Mozambique project has introduced simplified tools based on routine HIS data to highlight service delivery performance success and problems at the facility and district levels. The project team mentors district and facility health managers to use these tools for identifying, implementing and evaluating efforts to improve health system performance.
* **Rwanda:** In Rwanda, the Ministry of Health (MOH) and Partners In Health (PIH) have co-developed an electronic medical record (EMR) system (OpenMRS) and are implementing an enhanced version as part of the PHIT Partnership. In the three PIH-supported districts of Rwanda the EMR holds patient records for 33 health centers, including a catchment area of approximately 800,000 people. The EMR system includes comprehensive medical records for all patients with HIV, tuberculosis, heart failure, epilepsy, hypertension, asthma, chronic obstructive pulmonary disease, diabetes, and cancer. In addition, a medical record system has been developed and is being implemented for acute outpatient consults, including registration, presentation, diagnosis, laboratory tests, and treatment. The EMR supports patient care by providing clinicians with summaries of patient visits and laboratory test results; through:
1. reports of at-risk patients; and
2. administrative reports to support clinic management, resource allocation, and quality improvement (QI).
* **Tanzania:** The Connect Project aims to improve community-level availability, accessibility, and quality of primary health care services using community health agents (CHA) in three districts in rural Tanzania. The Connect Project has adapted and adopted existing community-level health information data capture tools and is working with CHAs to collect and integrate community-level data with the routine HIS at facility and district levels, with data feedback targeting workers at the community, dispensary, health center, and hospital levels.
* **Zambia:** The Better Health through Mentorship and Assessment (BHOMA) project is using an Electronic Data Capture System (EDCS) and mobile technology to improve the quality of data captured in the target districts. The BHOMA system includes a dedicated low-wattage Linux client terminal (powered by solar panels and a 12-volt battery pack) with touch screen data entry terminals attached to a miniature data processing server; into which patient visit information is entered. The system automatically generates performance reports based on predetermined performance indicators that identify facility-level performance gaps and are used by clinical QI teams to mentor facility staff on improving clinical care quality. The EDCS system also automatically generates and sends follow-up messages via general packet radio service (GPRS) technology to CHWs (via mobile phones) to indicate a need for patient follow-up. Using modems and cellular networks, BHOMA clinics access the internet to securely synchronize records to a central server, housed at CIDRZ headquarters in Lusaka, which, in turn, transmits the data to BHOMA district offices, and the MOH’s District Health Offices.

**Story – 2: *eHealth in Viet Nam:***

In order to strengthen planning and management in the health sector in Viet Nam and reduce inequities among poor and vulnerable populations, the Pathfinder is implementing activities that will enhance the health management information system (HMIS) and improve decision-making using better quality and timeliness of health information. The ultimate goal of the project is to roll out an improved HMIS, leading to better planning, better policy formulation, and better management of health programs across the country. Viet Nam will have an HMIS platform with simple data entry screens and sophisticated and user-friendly, customizable, frontend data presentation for more effective decision-making at the facility district and province levels. The system will integrate with the architecture of the information technology application and HMIS of the Ministry of Health. In support of this goal, Pathfinder is working to achieve the following objectives:

* *Roll out* an effective, well managed, and fully functioning HMIS model in Thai Nguyen province;
* *Increase* the provincial and district level capacity to use the HMIS model for effective data analysis and evidence-based planning; and
* *Replicate* and scale up the HMIS model in one other province and advocate for nationalization of the HMIS model

The Pathfinder (with headquarters at: Pathfinder International, 9 Galen Street, Suite 217, Watertown, MA 02472, USA, web: <http://www.pathfinder.org/about-us/>) believes that people everywhere have the right to live a healthy sexual and reproductive life. For more than 55 years, it has worked to expand access to quality sexual and reproductive health care to enable and empower individuals to make choices about their body and their future. The Pathfinder believes that: *“choice is everything”*. When people take charge of their life choices such as if or when and how often to have children, they gain confidence and strength. They can:

* *better pursue* their education,
* *contribute* to the local economy, and
* *engage* in their communities.

**Story – 3: *International Education Projects: Philippines:*** ***EdData II: Strengthening Information for Education, Policy, Planning and Management in the Philippines (PhilEd Data Project) (2012-2013):***

Following the data capacity assessment carried out by RTI International (RTI) under the Education Data for Decision Making (EdData II) project, USAID/Philippines is pursuing additional assistance to help build the capacity of the Philippine Department of Education (DepED) in several key technical areas. EdData II is a contract mechanism whose principal role is to improve the accuracy, timeliness, accessibility, and use of data for education policy and program planning. The purpose of this project is to help DepED make better use of existing data; generate and extract maximum value from new data; and build capacity for ongoing data generation, management, and analysis. The data capacity assessment identified several areas where DepED capacity to use data could be improved. Activities and results of the project are outlined below:

* *Assist DepED’s National Education Testing and Research Center to analyze the validity and reliability of the national standardized examinations and assessment tools currently being used:* In conjunction with leading education researchers from the Philippines Institute for Development Studies (PIDS), RTI will work closely with DepED–and in particular, with the National Education Testing and Research Center (NETRC)–to build their capacity to mine up to six years of results from two national assessments: the National Achievement Test (NAT) and the National Career Assessment Examination (NCAE).
* *Pilot a national, sample-based Early Grade Reading Assessment (EGRA) to establish a baseline relative to the goal of all children learning to read in the early grades of elementary school:* RTI will work closely with Philippine curriculum and language experts and with DepED officials to adapt the EGRA instrument for application in early grades in the Philippines. In collaboration with a local survey organization and with DepED, we will draw a nationally representative sample of schools in which to implement the EGRA. RTI will work closely with DepED to analyze and promulgate the results of the evaluation of students' reading skills, helping to both build capacity for ongoing assessment and analytical work and to develop further support for President Aquino's initiative to make sure children learn to read in the first grade.
* *Assist DepED in developing reporting formats for national assessment results that are consistent with its overarching objectives of transparency and accountability and that support the Department's strategic communications objectives:* RTI will draw on its experience designing district and school report cards in other countries to help DepED gain the capacity to prepare similar communications. They will learn to combine data from the education management information system (EMIS) and assessment results to create concise, useful reports that can provide information for school- and district-level dialogue and improvement planning. RTI will introduce DepED to data tools that can be customized to their needs and that can facilitate the production of report cards.

**Story – 4: *The District Health Information System (DHIS) Project for Evidence-Based Decision Making and Management, Pakistan:***

The Government of Pakistan (GoP) developed Health Management Information System (HMIS) in 1992 with the support of USAID, however, after the devolution in 2001, GoP felt need of revamping the centralized information system covering only first-level health facilities. Based on the request from GoP, JICA implemented the Study on Improvement of Management Information Systems in Health Sector (2004-2007). Through the study, a new health system called DHIS was developed and National Action Plan (NAP) for the nationwide prevalence of DHIS was approved at the Steering Committee. For the purpose of timely implementation of NAP through the capacity development of NHIRC, GoP asked the Government of Japan for technical cooperation. This project mainly consists of the following activities:

* *Installation and Maintenance of DHIS Software:* After revising the DHIS software, which was originally developed by JICA in 2009, it will be installed in the computers in the selected districts. Then, software maintenance works will be done by a local sub-consultant.
* *DHIS Trainings:* The following trainings will be conducted at the expense of Japanese side:
1. Training on Data Collection for all PHDs and some DHOs [=Basic Training on DHIS];
2. Training on Data Entry and Analysis for all PHDs and some DHOs [=DHIS Software Training]; and
3. Training on Use of Information for all PHDs and some DHOs [=Training on how to utilize DHIS data for resource allocation and budgeting].
* *Monitoring of Implementation of DHIS:* After the above trainings, the project will keep monitoring PHDs and DHOs in order to achieve the goals that DHOs submits the DHIS monthly report to PHDs in a timely manner and the list of identified items for the evidence-based resource reallocation and budgeting is available at PHDs and DHOs.

**Story – 5: *Farmer Decision Making in Cambodia: Smallholder perspectives and decisions about technology adoption in agro-ecological zones and farming systems of Cambodia:***

This small research and development activity (SRA) will engage with Cambodian smallholder farmers and experienced researchers in Cambodia and Australia to:

1. *explore the social, economic and cultural context for technology adoption; and*
2. *change in contrasting Cambodian agro-ecological zones and farming systems.*

Despite a significant research effort over more than a decade in lowland and upland regions of Cambodia, there has been little adoption of more productive farming systems based on research conducted within the country. There is an apparent disconnection between known technological advancements and farmer choice, as well as a disconnection between farmers and those who study their decision making pertaining to the adoption of new agricultural technologies.

The decisions made by farmers, and their decision-making processes, have been extensively studied in developed and developing countries, but not in an integrated manner nor in a way that treats farmers as legitimate partners with genuine knowledge and concerns. This research has shown economic incentives to be influential, but decision rationales to be more far-reaching.

There are numerous valid reasons for why such adoption and change has not occurred, but we do not know how Cambodian farmers make those decisions. Farmer motivations and consideration of their mitigating factors remains poorly connected to efforts to modernise the agricultural system. Further complicating our limited understanding of smallholder farmer decision-making is the variability of farming practices rooted in geography (i.e. upland and lowland locations) and livelihoods (i.e. subsistence or commercially oriented).

Two social research methods (focus groups and ethnographic research) will be compared in testing a social, economic and cultural framework to represent Cambodian smallholder farm families’ perspectives on development and change. The overall objective of the SRA is to improve understanding of Cambodian smallholder perceptions of new technologies and management change. Such improved understanding will strengthen R&D activities that target poverty reduction and food security through better understanding of farmer perceptions, values, and motivations to change. The research questions in this project are:

* What are the individual and collective perspectives of Cambodian smallholder farmers with respect to their agricultural livelihoods and how do their worldviews shape the adoption of technology and perspectives on change?
* What are Cambodian smallholder farmers’ perspectives with respect to technology adoption and change?
* What factors influence and constrain Cambodian smallholder farmers in considering change and innovation?
* What are the social, economic and cultural factors relevant for Cambodian smallholder farmers in considering change and innovation?
* What are typical behaviours (from a social, economic and cultural perspective) in farm-level decision-making?
* Do Cambodian smallholder farmers’ decisions vary between uplands and lowlands, and between different types (complexities) of technologies?
* What are the implications of migration and farm labour supply on farming systems management and decision-making?
* Are there improved ways of engaging with Cambodian smallholder farmers in terms of their social, economic and cultural framework for decision-making?

**Story – 5: *Swedish Water House, Sweden:***

The Swedish Water House (SWH, with office at: Linnégatan 87A, Box 101 87, 100 55 Stockholm, Sweden, web: <http://www.siwi.org/programmes/swedishwaterhouse/>, Email: siwi@siwi.org) connects Swedish water stakeholders from different sectors with each other and with international processes and discussions. It provides meeting places for innovative thinking on emerging issues, knowledge dissemination and multidisciplinary policy development concerning the global water situation.

The SWH annually organizes a range of seminars and workshops focusing on various topics in the field of water and development. In addition it supports Swedish participation in international meetings. A number of “cluster groups” bring together Swedish stakeholders from different backgrounds to address emerging water issues and develop joint policy recommendations. The overall strategic objectives of the Swedish Water House are to:

* *Contribute* to increasing the cooperation within the Swedish resource base, and increase engagement on international water issues.
* *Strengthen* communication and cooperation within and between a broad range of actors, representing different competence areas, and contribute to strengthening the link between research and development with policy development and decision-making.
* *Increase* Swedish actors’ participation in international water processes by creating different interfaces between Swedish and international actors and between the Swedish resource base and potential users.

The SWH was established in 2003 by the Swedish Government with the overall objective to support international policy development and cooperation in the water and development field by generating knowledge, disseminating it and building partnerships. SWH is part of the Stockholm International Water Institute (SIWI) and is located in central Stockholm.

**Section – II: Recommendations** **“on how to improve the uptake and relevance of FSN information for decision making”**

The essence of management is making decisions. Managers are constantly required to evaluate alternatives and make decisions regarding a wide range of matters. Just as there are different managerial styles, there are different decision-making styles. Decision making involves uncertainty and risk, and decision makers have varying degrees of risk aversion. Decision making also involves qualitative and quantitative analyses and some decision makers prefer one form of analysis over the other. Decision making can be affected not only by rational judgment, but also by non-rational factors such as the personality of the decision maker, peer pressure, the organizational situation, and others.

Decisions are made at different levels in an organization’s hierarchy:

* *“Strategic decisions”* are long-term in their impact. They affect and shape the direction of the whole business. They are generally made by senior managers. The managers of the bakery need to take a strategic decision about whether to remain in the cafe business. Long-term forecasts of business turnover set against likely market conditions will help to determine if it should close the cafe business.
* *“Tactical decisions”* help to implement the strategy. They are usually made by middle management. For the cafe, a tactical decision would be whether to open earlier in the morning or on Saturday to attract new customers. Managers would want research data on likely customer numbers to help them decide if opening hours should be extended.
* *“Operational decisions”* relate to the day-to-day running of the business. They are mainly routine and may be taken by middle or junior managers. For example, a simple operational decision for the cafe would be whether to order more coffee for next week. Stock and sales data will show when it needs to order more supplies.

As these examples show, decisions at all levels need data. A business creates a trail of data. This includes data on sales, employee costs and payments. In a large company, such as Tesco, millions of data items are created every day against thousands of cost and sales headings. This data can provide a picture of trends, which the business can use in its forward planning.

A successful organization makes good decisions, implements them well, and then learns from the experience in order to do better next time. This is shown in the following chart:



To make a good decision, the FSN Forum needs not only information about the specific instance, but also an understanding of the domain. In other words, managers / personnel of the FSN Forum need a set of principles, models, templates or other abstractions. **I suggest following recommendations and strategic interventions for the purpose of improve the uptake and relevance of FSN information for decision making**:

* *Work on the right decision problem:* Be careful in stating the problem, and avoid unwarranted assumptions and option-limiting prejudices.
* *Specify your objectives:* Determine what you want to accomplish, and which of your interests, values, concerns, fears, and aspirations are the most relevant.
* *Create imaginative alternatives:* Alternatives represent different courses of action, and your decision can be no better than your best alternative.
* *Understand the consequences:* Determine how well different alternatives satisfy all of your objectives.
* *Grapple with your tradeoffs:* Since objectives frequently conflict with each other, it becomes necessary to choose among less-than-perfect possibilities.
* *Clarify your uncertainties:* Confront uncertainty by judging the likelihood of different outcomes and assessing their possible impacts.
* *Think hard about your risk tolerance:* In order to choose an alternative with an acceptable level of risk, become conscious of how much risk you can tolerate.
* *Consider linked decisions:* Many important decisions are linked over time. The key to making a series of decisions is to isolate and resolve near-term issues while gathering information relevant to issues that will arise later.

Focusing on decisions does not necessarily require a strict focus on the mental processes of managers. It can mean examining the accessible components of decision making:

1. *which decisions need to be made,*
2. *what information is supplied,*
3. *key roles in the process, and*
4. *so forth.*

Smart organizations make multifaceted interventions. Such multifaceted interventions include addressing:

1. *technology,*
2. *information,*
3. *organizational structure,*
4. *methods, and*
5. *personnel.*

The FSN Forum can improve decision making in following three steps:

* *Identification:* The FSN personnel/managers should begin by listing the decisions that must be made and deciding which are most important (for example, *“the top 10 decisions required to execute our strategy”* or *“the top 10 decisions that have to go well if we are to meet our financial goals”*). Some decisions will be rare and highly strategic (“*What acquisitions will allow us to gain the necessary market share?”*), while others will be frequent and on the front lines *(“How should we decide how much to pay on claims?”*). Without some prioritization, all decisions will be treated as equal, which probably means that the important ones won’t be analyzed with sufficient care.
* *Inventory:* In addition to identifying key decisions, the FSN personnel/managers should assess the factors that go into each of them. The questions needing answer in this particular matter, for instance, include:
1. *Who plays what role in the decision?*
2. *How often does it occur?*
3. *What information is available to support it?*
4. *How well is the decision typically made?*

Such an examination helps an organization understand which decisions need improvement and what processes might make them more effective, while establishing a common language for discussing decision making.

* *Intervention:* Having narrowed down list of decisions and examined what’s involved in making each, the FSN personnel/managers can design the roles, processes, systems, and behaviors the organization ( the FSN Forum in this case) should be using to make them. The key to effective decision interventions is a broad, inclusive approach that considers all methods of improvement and addresses all aspects of the decision process, including execution of the decision (which is often overlooked).

*“Decision-making tips”*, the FSN Forum should envisage for the purpose of enhancing relevance of its information for decision making, include:

* *Prioritization:* Not spending effort on decisions that are not needed.
* *Decision timing:* Future outcomes always carry uncertainty, and making a decision may sometimes be the least expensive way to gain the knowledge of what will happen.
* *Process:* Recognize the difference between the process and repeatedly making the same decision. A new situation and circumstances make it a new decision.
* *Emotions:* Not deciding is a decision not to act. Take responsibility and decide, even if it is to choose to not act now.
* *Changing a decision:* Good decision making does not guarantee outcomes. The unexpected will happen. Always be open to new information, and be prepared to make a new decision if it becomes clear that decision goals and criteria will not be met.
* *Building skills:* Learn about decision traps, biases and mistakes. Knowing about these common errors makes it possible to avoid them. Decision making skills improve with practice. Don't be afraid to choose.
* *Values:* Values last. So should your most important decisions. Consider short and long term consequences when you choose.
* *Seeking information and avoiding overload:* Distinguish fact from interpretation. A large amount of the information we use in decision making is laden with interpretation that can bring up emotions that can lead to poor choices.

**Brief Resume of Contributor (Dr. Santosh Kumar Mishra)**

Dr Santosh Kumar Mishra is researcher & demographer employed with the S. N. D. T. Women’s University (SNDTWU, <http://sndt.ac.in/>) located at Mumbai in India. He underwent training in demography from the IIPS, Mumbai, India. (<http://www.iipsindia.org/>). He acquired Ph. D. in 1999. He is Reviewer/Editorial Board Member for 31 international journals. He has also reviewed papers for 5 international conference sessions, including EURAM 2014 Conference (4-7 June 2014, University of Valencia, Spain, <http://site.aace.org>). His subject areas of interest include: population & development education, issues pertaining to population-development linkages, education for sustainable development, adult & continuing education/non-formal/extension education, etc. Dr. Mishra has (a) co-authored 5 research studies (published by the SNDTWU); (b) presented 32 papers for national conferences & 11 papers for international conferences, & (c) authored/co-authored 5 handbooks/booklets (published by the SNDTWU, 5 books, & 11 book chapters. In addition, he has 30 articles published in national journals and 18 in international journals. Dr. was previously awarded Government of India fellowship at the IIPS (1986-1987) and travel scholarship for sharing his research views at international conferences and summits held at Karachi (Pakistan), Dare es Salaam (Tanzania), Stockholm (Sweden), Madison (USA), Dushanbe (Tajikistan), Canberra (Australia), and Manila (Philippines). He is Advisory Board Member of the American Academic & Scholarly Research Center (<http://aasrc.org/?page_id=38>) and Reviewer–cum–International Advisory Board Member for the AASRC 2013 International Conference – Beirut, Lebanon (http://aasrc.org/conference/? page\_id=803).