

RESEARCH  
 ARTICLE

## From 'Knowledge is Power' to 'Sharing Knowledge is More Powerful'

The challenge of developing knowledge-sharing culture in innovation systems

By **Martina Spisiakova**

### Introduction

Today, 'knowledge' is considered to be a key resource that fuels society and drives innovation. The power of organizations and individuals comes from what they know, how efficiently they use what they know, and how quickly they learn and apply new knowledge. Mutual learning and collective action among individuals and groups foster innovation; when they collaborate and share knowledge, they are able to avoid repeating the same mistakes and use resources more effectively.

As such, knowledge must be 'managed' to ensure the full utilization of valuable lessons and best practices, combined with individual skills, competencies, ideas and innovations, to create a more effective and efficient organization (Dalkir, 2005). Knowledge management (KM) is an important discipline aiming to address this challenge by leveraging know-how across and between people and organizations to improve decision-making, innovation, partnerships and overall organizational results.

In the development world, farmers, researchers, governments, local organizations, bilateral and multilateral agencies, as well as the private sector, all have a stake in the management of knowledge. However, valuable knowledge is often buried in unread reports, irrelevant and unused data, and ineffective filing systems, or in the heads of individuals who are not willing to share what they know. This is why integrating KM in the innovation process requires a cultural shift from an individualistic way of working and storing knowledge toward a collaborative way of working.

### The bottom of the iceberg

It is important to stress the difference between explicit and tacit knowledge, the distinction of which is the most fundamental concept of KM (Skyrme, 2011). According to Nonaka and Takeuchi (1995), explicit knowledge can be easily expressed in words and numbers and it is easy to codify, document, transfer and communicate in the form of manuals and procedures, scientific formulae or universal principles (as cited in Skyrme, 2011). However, such knowledge is seen 'only as the tip of the iceberg' with the vast majority of knowledge being tacit and difficult to codify (Skyrme, 2011). According to Nonaka and Takeuchi (1995) tacit knowledge is described as not easily visible and expressible, personal, hard to formalize, difficult to communicate, developed from action and experience, subconsciously understood and applied, and captured in the term 'know-how' (as cited in Skyrme, 2011).

This tacit knowledge is a major resource for innovation. It enables us to make sense of previous experiences and to connect patterns from the past to the present and future, as an essential part of the innovation process. It is deeply embedded into organizational operating practices and can provide a



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sustainable source of competitive advantage (Kotelnikov, 2001). However, it also presents a major management challenge for knowledge workers.

### Knowledge management is about people, not machines

The increasing reliance on science and technology innovation as a source of competitive advantage driving the knowledge economy brings recognition of the need to identify tacit and codified knowledge in an innovation system, and to manage its creation, tracking, exchange and ownership (David and Foray, 1995). However, in triggering changes that facilitate innovation processes, many organizations perceive knowledge and innovation management mainly as related to knowledge-sharing infrastructure and tools, with the people and culture that provide context for information, often receiving the least (if any) attention. Infrastructure helps facilitate KM and innovation processes, but we often forget that KM is about people and not machines (Dalkir, 2005).

Technology cannot change people's behaviour or create a demand for knowledge sharing (Dalkir, 2005). The challenge is to use it to link people together so that they get the knowledge they need. Attention needs to be paid to content and its use. Technology also cannot replace face-to-face interactions such as informal networks and peer-to-peer learning, which both play very important roles in facilitating KM and innovation processes. While it is important to improve access to information and knowledge, including its availability, accessibility, and affordability through information and communication technology (ICT) tools, it is also important to promote knowledge sharing through learning circles, networking, peer-to-peer technology, Communities of Practice (CoP) and improved interaction and mutual learning (Spisiakova, 2011). The combination of such processes can help produce a culture where knowledge sharing becomes the norm, not the exception, for human relationships – where people are encouraged to work together, to collaborate and share, and where they are rewarded for what they do. Only the organizations that harness the power of co-operation can effectively use knowledge to be more productive (Gurteen, 1999).

### Cultural change

Experience shows that it takes a very long time to launch and subsequently maintain cultural change. It requires changing attitudes and

aspirations, beliefs and values that inform action (Dalkir, 2005).

Knowledge and innovation flow when people perceive that there is a climate of trust and the people with whom they exchange views are credible. When people feel that they are respected and that they can trust their colleagues and peers, then knowledge sharing can be greatly enhanced (Dalkir, 2005). To build trust, it is important to inform, involve and motivate stakeholders, which requires effective communication.

Communication enables people to transmit culture to each other and develop it in a certain way. On the other hand, culture influences communication between people. According to Neher (1997), culture encourages certain topics for communication and discounts others. It often determines who talks with whom, on what occasion, and about what. It also determines how people interact with each other, how they perform tasks, solve problems, treat others and how they are expected to behave (Dalkir, 2005).

Greater transparency also serves to enhance innovation through greater inclusiveness in knowledge processing. By involving more stakeholders in knowledge production and integration, organizations can ensure more quality control over knowledge in use and more stakeholder participation in the process. The transparency problem is fundamentally a KM problem because bad practice means bad knowledge in use, and bad knowledge in use is the product of dysfunctional knowledge processing (Dalkir, 2005).

### Knowledge management cycle

KM theories help us understand how knowledge, as an intangible asset, is produced, tracked, used, managed and valued in innovation systems (Romer, 1998). Based on the work of Meyer and Zack (1996), Bukowitz and Williams (2000), McElroy (2003), and Wiig (1993), Dalkir developed the 'Integrated KM Cycle' framework (see Figure 1) that consists of three main phases: 1. Knowledge Capture and/or Creation; 2. Knowledge Sharing and Dissemination; and 3. Knowledge Acquisition and Application.

While knowledge capture refers to the identification and codification of existing internal and/or external knowledge and know-how, knowledge creation is about the development of new knowledge and know-how, e.g. innovations (Dalkir, 2005). The content and its value to the

**Dear Palawija News Readers,**

Around the world, innovative solutions are urgently required to address the challenges of food security and climate change. Investment into the agricultural sector continues to be an important element of an inclusive growth strategy that supports equality and resilience.

Successful agricultural development depends on complex innovation systems rather than on technological development alone. Such innovation systems include aspects related to food consumption, agricultural production, environment, climate, ecology and trade, and the engagement of a diverse set of stakeholders from the public and private spheres. Too often, new technology solution are developed but not adopted because these various factors and stakeholders are not taken into account.

To address these issues, the Economic and Social Commission for Asia and the Pacific (ESCAP), and the European Union (EU) are working together through SATNET Asia - a 'Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and South-East Asia' that focuses on supporting innovation by strengthening South-South dialogue and intraregional learning on sustainable agriculture technologies and trade facilitation. More information on this project can be found in the 'CAPSA News and Activities' section of this newsletter.

Both articles in this issue highlight the importance of innovation and knowledge within systems. The contribution by Martina Spisiakova, "From 'Knowledge is Power' to 'Sharing Knowledge is More Powerful': The Challenge of Developing Knowledge-Sharing Culture in Innovation Systems", underlines that successful knowledge and innovation management begins with a sound strategy that recognizes the importance of knowledge sharing in organizations. The second article on "Monitoring, Evaluation and Knowledge Management: CInI Experience" prepared by Vartika Jaini and Ayan Deb focuses on practical aspects of innovation in agriculture, based on the experience of the Collectives for Integrated Livelihood Initiatives (CInI) and its partners in establishing a monitoring and evaluation system for food security programmes in the state of Jharkhand in central India.

The World Bank's recently published book "Agricultural Innovation Systems: An Investment Sourcebook" is also reviewed in this issue to provide our readers with broader and in-depth insights on the topic.

We hope that you enjoy reading this issue. The newsletter will continue to be a vehicle for promoting communication in the Asia and Pacific region on sustainable agriculture, poverty reduction and food security.

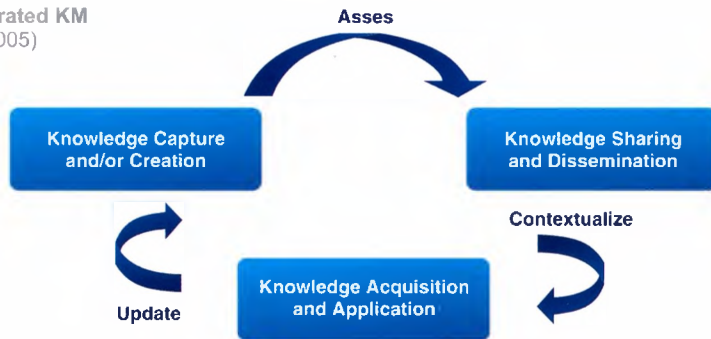
**The Editor**

organization needs to be validated and contextualized. The content should then be delivered to the potential end-users through sharing and dissemination, keeping in mind the means of delivery, timing, frequency, form and language. Users will then try to understand the content, validate its usefulness and relevance, and make use of it through its application in their work (Dalkir, 2005). The cycle can help organizations consider the different phases through which knowledge and innovation flow and the attitudes needed for this flow to happen. This article explores the phase of knowledge sharing and dissemination.

**Culture of knowledge sharing and dissemination**

A knowledge-sharing culture can be defined as one where the paradigm of 'knowledge is power' shifts to that of 'sharing knowledge is more powerful' (Dalkir, 2005) and where collaboration positively influences the effectiveness of knowledge work (Sveiby and Simons, 2002). The problem is that people are generally not willing to leave their comfort zones, especially when they cannot see how the proposed change could improve their lives.

Figure 1. Integrated KM cycle (Dalkir, 2005)



### **Improving motivation through incentives**

Generally, individuals are more likely to be rewarded for what they know, rather than for what they share. As a result, the hoarding of knowledge often leads to negative consequences such as empire building, reinvention of the wheel, feelings of isolation, and resistance to ideas from outside an organization (Dalkir, 2005). To motivate employees to embrace KM and innovative behaviour, incentives can send out powerful messages about what is important in their organization. For example, knowledge sharing can be integrated in performance evaluation criteria as one of the key competencies of all staff and linked to salaries and promotions. Organizations can also promote role models by publicly rewarding examples of collaboration, good teamwork, innovations and knowledge re-use (Dalkir, 2005).

Furthermore, research shows that creating more learning opportunities that respond to people's immediate learning needs could be an incentive as well (Spisiakova, 2011). Being part of a CoP can address these needs and also help retain employees. Working as an active member of a CoP provides a significant incentive for a knowledge worker to stay with that organization, as well as helping to quickly link new members to the network and organizational culture (Dalkir, 2005). But more importantly, embracing KM should be its own reward if people recognize the benefits it brings and the way it makes their life easier. If KM does not make life easier for employees, it will fail (Dalkir, 2005).

### **Leadership that values and supports KM and innovation**

According to Dalkir (2005), if real long-term sustainable organizational change is to occur in organizations, it has to happen at the cultural level, with strong and supportive leadership. To understand what is important in the organization, employees observe and listen to leaders. If a leader is actively sharing knowledge, encouraging collaboration and innovation, and rewarding such

behaviour, employees can recognize it as important and are more likely to change (Dalkir, 2005).

### **Enhancing social capital through networking and communities**

A person's education, skills and experience are insufficient to generate trust, and create and enforce norms (Dalkir, 2005). People produce knowledge only by interacting with others (Klimecki and Lassleben, 1999). Through communication, people influence each other's views and create or change shared constructions of reality (Dalkir, 2005). There is therefore a need for concrete personal relationships and networks that influence individual behaviour and produce shared knowledge. Knowledge-sharing communities are the primary producers of this network of relationships, also called 'social capital'. They make connections between individuals so that they can solve problems and make decisions based on shared interest and knowledge (Dalkir, 2005).

For Huysman and de Wit (2002), a collective acceptance of shared knowledge is the key to generating value to the organization. For such learning to happen, organizations must encourage networking by connecting people –usually like-minded individuals with common interests– rather than hierarchies that create authority and formal channels of communications. These networks, also called CoP, connect everyone, operate informally, depend on trust and make formal ranks unclear (Dalkir, 2005). Their main characteristics are a common goal, commitment and a shared virtual workspace in which members can communicate with each other, store and share knowledge and ideas (Wenger, 1998).

Through its experience, the World Bank identified some success factors of these communities. Firstly, it is crucial that staff members choose issues or themes in which they are interested and form groups around these issues. Secondly, a virtual workspace alone is insufficient for CoP to work; face-to-face contact is also very important. Furthermore, external partners must be included in CoP to provide an additional source of know-how. This knowledge-sharing partnership means access to top quality expertise (APQC, 2003).

### **Allocating time for knowledge sharing or a different way of working?**

People often perceive KM as burden – an additional activity to what they are already doing. To understand KM, we need to see it simply as a different way of working by embedding

knowledge-sharing and learning activities in core business processes. Rather than introducing new KM processes, we can improve the existing ones by undertaking various activities with the explicit intention of managing the knowledge needed or produced during these activities (Spisiakova, 2011). For example, the World Bank is incorporating knowledge sharing and learning into its way of doing business by increasing interest among different departments to map and manage their knowledge as well as increasing the interest of stakeholders (APQC, 2003).

### ***Tolerating mistakes and failure to promote innovation***

Changes imply mistakes. Not tolerating risk of failure and mistakes can prevent employees from taking risks and trying innovative approaches in their work, thus impeding the success of KM. However, if the organization's role models and reward systems actively promote, support and value such interactions, then cultural change can be facilitated (Dalkir, 2005).

Robbins (2001) has a different perception of risk. Our cultures have been programmed to fear failure (Robbins, 2001). The organizations and individuals that succeed are not those who do not fail, but those who know that if they try something and it does not give them what they aimed for, they have had a learning experience. They use what they learned and try something else (Robbins, 2001). So organizations need to re-frame their perspective of failure and commit to learning from every experience. Leaders who possess such a vision and commitment can facilitate the achievement of desirable results and innovations as they transmit their values to their employees and create an environment that is open to creativity, flexibility and innovation.

### ***Creating more systematic and engaging knowledge-sharing platforms***

Organizations often underestimate the value of knowledge-sharing platforms, including methods and techniques for learning and finding solutions. When they are systematic, such platforms enable people to work together, discover, share and re-use valuable knowledge, new ideas, experts, and other intellectual assets that exist and can be capitalized upon (Dalkir, 2005).

Electronic discussion forums can be effective in facilitating dialogue and knowledge sharing on key issues and challenges facing the particular community, with a specific emphasis on learning from the experience of those who face similar challenges in their daily lives. To promote

networking, organizations are also adopting a range of portals (e.g. IFAD Asia), and improving their intranets and knowledge repositories. While such platforms can provide many functions for validating and sharing knowledge and expertise, discussing issues, or joining a community, it is important that they offer a sense of ownership, participation and diversity of content and sources (APQC, 2003).

Creating opportunities for face-to-face interactions are equally important. Organizations need to systematically organize meetings, seminars, workshops and knowledge markets/fairs that provide opportunities for learning and are complementing other knowledge-sharing processes and tools (Spisiakova, 2011). Experience shows that knowledge-sharing events can also benefit from using alternative facilitation methods. IFAD, for example, has been trying to move away from traditional meeting formats and promote collaborative learning by using methods such as peer assists, creative problem solving, after-action reviews, open space technology, and storytelling to solve specific problems and facilitate learning on innovative approaches in use and potential application elsewhere. These formats are fun and have the capacity to engage people and stimulate more learning, sharing and thinking outside the box (IFAD, 2010).

### **Conclusions**

Successful knowledge and innovation management begins with a sound strategy combined with fostering of organizational culture that enables and rewards the sharing of valuable knowledge. While technology is important to facilitate knowledge sharing and collaboration, more attention needs to be paid to its content and use. It also cannot replace important face-to-face interactions. To promote knowledge sharing, we need to look at it holistically through learning circles, networking, peer-to-peer assistance, CoP, improved interactions and mutual learning. The concrete personal relationships and networks that are created through this process are a basis for trust. Knowledge flows when people perceive there is a climate of trust, which is one of the key prerequisites of culture that promotes KM and innovation. The social capital that is strengthened in such an environment needs to be maintained through continuous investment in learning and development. Together with appropriate incentives, this would help create a collaborative and knowledge-sharing culture, without which knowledge cannot be managed effectively and innovations cannot be properly documented, shared and applied in new contexts.

## SHORT ARTICLE

# Monitoring, Evaluation and Knowledge Management: CInI experience

By CInI Team

## About the organization

**C**entral India Initiative is an outcome of Sir Ratan Tata Trust's (SRTT) keen interest in making a tangible impact in the central Indian tribal belt – home to almost 80 per cent of tribal communities in India. Over two-thirds of poor households in India reside in the central Indian plateau, across 110 districts identified between 18 degrees and 25 degrees north of the equator, and spread across Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Chhattisgarh, Orissa, Jharkhand and West Bengal. Notwithstanding the rich vegetation and good rainfall, the tribal people living in these districts live in conditions of poverty and often face acute food insecurity, high rates of malnutrition, and higher infant and child mortality rates. These indicators are a reflection of the historical social exclusion of these communities.

Central India Initiative was initiated with a research process in 2004-05 under the IWMI-TATA Water Policy Programme to identify and develop a roadmap for interventions in this region. The research study recommended the promotion of water-centric tribal livelihoods through focused and localized interventions and identified four zones based on agro-ecological, infrastructural and socio-economic status of communities.

Central India Initiative partners with 30 civil society organizations and 400,000 tribal households in the central Indian tribal belt. As the nodal agency, **Collectives for Integrated Livelihood Initiatives (CInI)** is responsible for developing Central India Initiative projects as demonstration sites for comprehensive tribal development and for influencing policy and practice based on these experiences. CInI provides technical backstopping to partners and focuses on piloting and scaling up new learning and disseminating it across various locations. This article is based on the experience of CInI and its partners in establishing a monitoring and evaluation system for food security programmes in the state of Jharkhand, particularly since 2007.

## Evolution of monitoring and evaluation system

CInI developed the Monitoring, Evaluation and Learning (MEL) system to streamline programmes, create a steady flow of information and establish platforms for learning and dissemination at different levels, thereby helping stakeholders to make informed decisions.

In its initial years, CInI focused its MEL activities on giving inputs into project implementation based on reviews and evaluations with external thematic experts. As CInI has evolved in its role as a resource agency, this has undergone a significant shift. CInI recognizes that change in the field requires de-bottlenecking on a regular basis. Systems within the projects have to be strengthened and the learning dimension needs to be enhanced for change to be sustainable. CInI is therefore now focused on providing ongoing support and capacity building to partners through inputs in programme development based on village planning, establishment of quality indicators and systems for generating these, standardization and smooth flow of information using a management information system. Thus, there is a conscious shift away from an extractive and externally driven approach to one that is internally driven, inclusive and learning oriented. CInI believes that lessons generated from the MEL system should get ploughed back to different stakeholders, including the community.

CInI works in diverse and geographically spread out areas in different agro-climatic zones. It has always been a challenge to collate information across multiple locations while maintaining commonality. The following tools are being developed to help in collating information systematically and intelligently tagged to context, to allow for further analysis.

## Impact Monitoring Information System (MIS)

CInI has conducted more than 12 baseline and impact assessment studies of projects each year, reaching approximately 24,000 of the most



marginalized households in some of the remotest areas of the central Indian tribal belt. Until last year, this was done through standalone studies that followed different methodologies and could not be juxtaposed or compared with secondary data. In order to streamline this function and also make collected data available to a wider stakeholder group, CInI has developed a software application.

(<http://cinihhsurvey.mwtestsite.com/cinihhsurvey>).

This process has involved:

- **Standardizing study methodologies** and defining indicators for key elements of CInI programmes such as food security, income enhancement, access to savings and credit sources. A stratified random sampling technique has been adopted in which stratification of households is done at the hamlet level, based on results of well-being ranking exercises.
- **Using trained data collectors to collect and enter data** in an offline Windows-based software. Offline application enables data collectors to use the software even in locations with intermittent or poor internet access. The software is linked with the online Windows-based software. Analyses on key indicators have been done across various well-being strata.
- **Making information available** for each project that can be drilled down at various levels, from the state, district, and block levels, to the village level. Since the data collection is based on fixed parameters, an analysis across geographies and change over time can be seen. The functionality of comparing this with secondary data is also being developed.

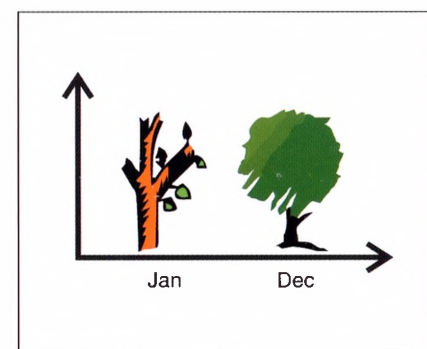
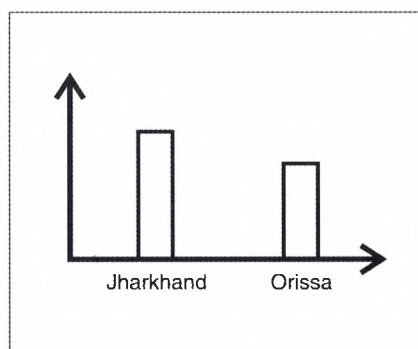
This MIS tool is an effective mechanism to enable policymakers and project implementers to prioritize key issues. The system also effectively captures the high level of diversity across the villages in this region.

*Future plans:* The impact MIS software is running successfully and data from almost 1,000 households from seven districts, 11 blocks and 45 villages from across Jharkhand and Orissa, have been entered into the system. Currently, CInI is trying to link this software into a Geographical Information System that will allow for spatial analysis. CInI is making the MIS software available as a platform for other stakeholders in

the central Indian tribal belt. Over time, this has potential to become a repository of reliable information on the impact of development interventions in this region.

### Food Security Monitoring Information System (FSMIS)

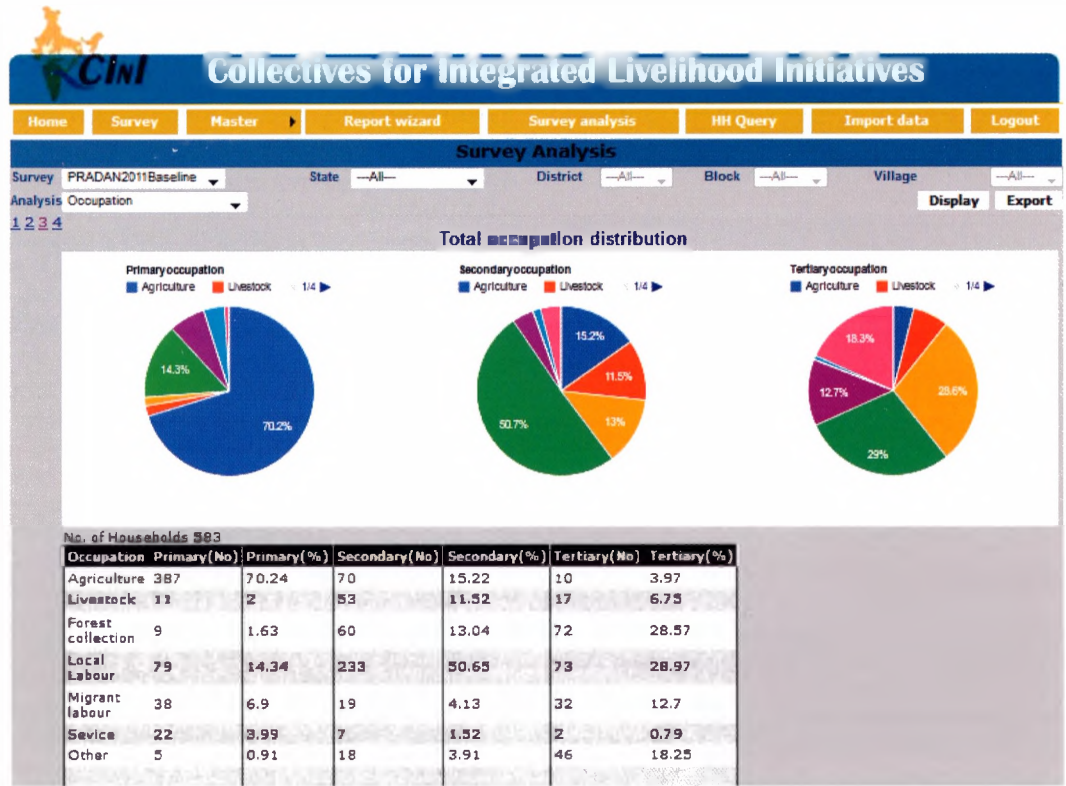
CInI's major objective has been to ensure year round food security for tribal families from their own farms. Paddy and maize are the major staple crops of tribal communities in eastern and western tracts, however, low productivity leading to food insecurity, and hence migration, have lead CInI to work on the stabilization of *Kharif*, or monsoon crop. Nineteen non-profit organizations and 70,000 farmers are involved in this initiative.



CInI and its partners needed to develop an FSMIS to enable an efficient MEL loop and streamline the information flow from the farmer level to the programme. CInI introduced a farmer field diary to capture pictorial information on the crop-specific package of practices. Using FSMIS, CInI and its partners record a baseline of 7,000 households, along with farmer level data on performance against the recommended package of practices. The field supervisor is responsible for managing this data and its flow; the farmer retains one perforated sheet and the supervisor submits the other sheet to the data entry operator located at the partner's office. The baseline information is entered into the online database. After the data entry is complete, the software provides the scope for analysis of the data generated, thereby allowing CInI and the partner to see the results.

The 2011-12 Monsoon (*Kharif*) season was the first time that CInI rolled out the FSMIS. At the end of the season, CInI undertook a reflection exercise with partners and farmers on the usability of the tool. The tool emerged as an effective means of providing field-level monitoring

Figure 1. CInI MIS platform



support to the farmers. The data generated helps partner organizations to identify issues faced by the farmers at the field level, and thereby take corrective measures. The analysis generated at the end of the season also assists CInI and its partners to understand the progress of the entire season and areas of improvement for the next season. The modified FSMIS building on the feedback from partners will include: a) data collection from all farmers on a census basis, so that timely discussions based on the information generated from FSMIS take place at partner and farmer level; b) online entering of data on sample basis, thereby helping CInI and its partners to refine programme delivery for the next year.

### Way forward

CInI, in its endeavour to improve food security among tribal households, is working to effectively integrate the community learning and reflection process within its current monitoring framework. In doing so, every interaction with partners is rich in process-oriented learning. This learning is further discussed and shared through various events, such as write shops and thematic seminars where mutual learning across diverse locations is established. Over time, processes of learning and review by the community for the specific contexts in which we work will continue to evolve. Going forward, CInI will continue its efforts to integrate a practical and contextualized approach to monitoring, evaluation and learning into programme design and implementation.

*(References available upon request)*



## Agricultural Innovation Systems: An Investment Sourcebook

The World Bank, 2012. ISBN 978-0-8213-8684-2.

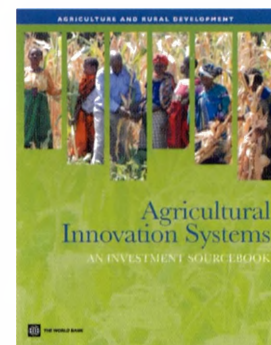
**M**anaging the ability of agriculture to meet rising global demand and to respond to the changes and opportunities will require good policy, sustained investments, and innovation – not business as usual. Investments in public Research and Development (R&D), extension, education, and their links with one another have elicited high returns and pro-poor growth, but these investments alone will not elicit innovation at the pace or on the scale required by the intensifying and proliferating challenges confronting agriculture. Experience indicates that aside from a strong capacity in R&D, the ability to innovate is often related to collective action, co-ordination, the exchange of knowledge among diverse actors, the incentives and resources available to form partnerships and develop businesses, and conditions that make it possible for farmers or entrepreneurs to use the innovations. While consensus is developing about what is meant by 'innovation' and 'innovation system', no detailed blueprint exists for making agricultural innovation happen at a given time, in a given place, for a given result. The Agricultural Innovation Systems (AIS) approach that looks at these multiple conditions and relationships that promote innovation in agriculture has, however, moved from a concept to a sub-discipline with principles of analysis and action.

AIS investments must be specific to the context, responding to the stage of development in a particular country and agricultural sector, especially the AIS. This sourcebook contributes to identifying, designing, and implementing the investments, approaches, and complementary interventions that appear most likely to strengthen AIS and to promote agricultural innovation and equitable growth. It emphasizes the lessons learned, benefits and impacts, implementation issues, and prospects for replicating or expanding successful practices.

The information in this sourcebook derives from approaches that have been tested at different scales and in different contexts. It reflects the experiences and evolving understanding of numerous individuals and organizations concerned with agricultural innovation, including the World Bank. This information is targeted to the key operational staff in international and regional development agencies and national governments who design and implement lending projects and to the practitioners who design thematic programmes and technical assistance packages. The sourcebook can also be an important resource for the research community and NGOs.

(Source:  
[http://books.google.com/books?id=eDNWVYAAp8wC&dq=agricultural+innovation+systems+an+investment+sourcebook&source=gbs\\_navlinks\\_s&redir\\_esc=y](http://books.google.com/books?id=eDNWVYAAp8wC&dq=agricultural+innovation+systems+an+investment+sourcebook&source=gbs_navlinks_s&redir_esc=y))

### BOOK REVIEW



## NEWS AND ACTIVITIES

### Inception Workshop of SATNET Asia

The Economic and Social Commission for Asia and the Pacific (ESCAP), under the leadership of the Centre for Alleviation of Poverty through Sustainable Agriculture (CAPSA), and the European Union (EU) are joining forces for improved food security and nutrition of the poorest and most vulnerable people in South and South-East Asia through SATNET Asia - a 'Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and South-East Asia'. The project will support innovation by strengthening South-South dialogue and intraregional learning on sustainable agriculture technologies and trade facilitation.

CAPSA-ESCAP, with support from the EU, convened the Inception Workshop of SATNET Asia from 13 to 14 March 2012 in Bogor, Indonesia. The workshop followed ESCAP's recent grant award to establish and facilitate a network on sustainable technologies for agricultural production and processing, and facilitation measures for agricultural trade. During the workshop, participants shared their experiences of best practices for sustainable agriculture, trade facilitation and capacity building, and agreed on a work plan for the first year.

Twenty-six participants attended the two-day workshop, including representatives from Bangladesh, Bhutan, Cambodia, India, Indonesia, Lao People's Democratic Republic, Myanmar, Nepal, Pakistan, as well as from the Trade and Investment Division (TID) of ESCAP, the Asian and Pacific Centre for Transfer of Technology (APCTT), the World Vegetable Centre – AVRDC ESEA (Thailand), the University of Hohenheim (Germany), the International Fund for Agricultural Development (IFAD), the Delegation of the European Union to Indonesia, Brunei Darussalam and ASEAN. Participants expressed their strong commitment to contribute actively in the network.



Participants of the workshop

### Eighth Session of the Governing Council of CAPSA

The Government of Indonesia hosted the Eighth Session of the CAPSA Governing Council in Yogyakarta, Indonesia from 21 to 22 March 2012. Representatives of Bangladesh, Indonesia, Republic of Korea, Malaysia, Myanmar, Papua New Guinea, the Philippines, Thailand and Viet Nam, as well as international organizations, attended the session.

United Nations Under-Secretary-General and ESCAP Executive Secretary Dr. Noeleen Heyzer shared a message with meeting participants, read by Dr. Aynul Hasan, Officer-in-Charge of the ESCAP Macroeconomic Policy and Development Division. In her statement, Dr. Heyzer emphasized the need for Asian and Pacific countries to work together to identify sustainable approaches to achieve food security for all. She

also noted that ESCAP member states should provide increased and more stable institutional support to CAPSA to enable it to assist Asian and Pacific countries more effectively in facilitating South-South co-operation.

The Governing Council recommended that the Centre should continue to focus on technology development and promotion of an enabling policy environment for sustainable agriculture, including addressing the nexus between food, energy and water security. It also suggested that member states should help identify innovative and sustainable mechanisms to increase institutional funding to CAPSA.

Council session participants joined a field trip to the Assessment Institute for Agricultural

Technology and visited farmer groups in Gunung Kidul district, Yogyakarta, organized by the Ministry of Agriculture of Indonesia.

ESCAP, with CAPSA, is implementing Resolution 65/4 adopted by the 65th ESCAP Commission Session on Strengthening of CAPSA. The

resolution aims to make CAPSA an effective knowledge centre embracing South–South co-operation on poverty alleviation through sustainable agriculture.

CAPSA efforts have won recognition with a €2.5-million European Union grant for 2012-2014.

## NEWS AND ACTIVITIES

### Strengthening CAPSA's Statistical Database

Between December 2011 and March 2012, CAPSA and the Statistics Division of ESCAP collaborated closely to enhance the services provided to member states in the area of agricultural statistics.

For approximately 25 years, CAPSA's database has provided statistical data on secondary crops for 17 Asian and Pacific countries. The focus of this database was on production and price data, primarily for pulses, tubers and root crops. As CAPSA has recently shifted its mandate from conducting socio-economic research on commodities to addressing sustainable agriculture in a systemic context across the Asia and Pacific region, a revision of the database became necessary.

The Statistics Division of ESCAP provided assistance in this process to ensure that the revised database is of high quality and standards, fully reflects CAPSA's mandate, and adds value to ESCAP member states. As part of the collaboration, staff from the Statistical Information

and Services Section at ESCAP conducted three technical advisory missions, working with CAPSA staff to conduct a review of the database, assist with the development of an action plan for the restructure of the database including a clear strategy and a work plan, and develop a plan for improving the database system and data management process. The statistics team provided practical recommendations related to expanding the database and proposed different data dissemination tools in the context of CAPSA's needs.

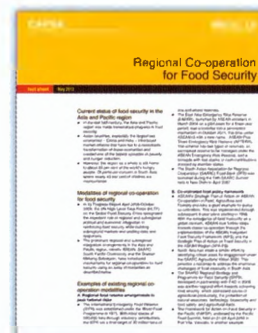
The restructured database will provide CAPSA with statistical information for in-house research and analysis in the field of alleviation of poverty through sustainable agriculture. It is also envisaged that the database will provide statistics necessary for other agricultural research institutes to perform research in-line with CAPSA's mandate; and to support member States' decision makers in developing evidence-based policies. CAPSA aims to make the revised database available to the public in 2012.

### CAPSA Fact Sheet

### Regional Co-operation for Food Security

The Fact sheet emphasizes some key points on the regional co-operation issues on food security in the Asia and Pacific region, such as: current status of food security, modalities of regional co-operation for food security, some examples of existing regional co-operation modalities and how to promote further regional co-operation for food security.

The Fact sheet can be accessed online at: <http://www.uncapsa.org/publication/fact-sheet-May2012.pdf>



## SUCCESS STORY

# Sand-based Mini Hatcheries for Rural Poultry in Bangladesh

Backyard poultry production is an important source of income and nutrition for the rural poor in the developing world. The foundation of this system is a regular supply of chicks and ducklings.

Mini-hatcheries or incubators have been used to hatch chicken and duck eggs in Egypt and China for some 3,000 years. Mini-hatcheries have been in use in Bangladesh since the 1970s. In 1992, BRAC – a Bangladesh-based non-governmental organization (NGO) – started a programme to promote the use of an incubator based on heated rice husk. However, the system was not widely adopted, largely because of poor management of fertile eggs in the supply chain.

With financial support from the International Fund for Agricultural Development (IFAD), the Palli Karma-Sahayak Foundation (PKSF) has produced a more efficient and functional incubation system through an adapted, comprehensive training programme that covered all aspects of the rural poultry production chain. In particular, PKSF organized a four-week practical

training programme for rural women that was developed and carried out by a livestock agent at the village level. This training, together with follow-up support from technical staff, has enabled poor women to become successful operators of mini-hatcheries.

Mini-hatcheries can be constructed from cheap materials available locally, such as rice husk, quilts and sand, to retain heat. The incubators can be easily made using readily available skills and tools.

Sand-based mini-hatcheries give the highest hatching percentages for both chicken and duck eggs (80-85 per cent and 70-72 per cent respectively, compared with 70-75 per cent and 65-68 per cent for rice husk incubators and 75-80 per cent and 60-62 per cent for rice husk and quilt incubators). As a result, sand-based incubators are gaining popularity.

*Source: "Building and operating a mini-hatchery: sand method", A manual published by the International Fund for Agricultural Development (IFAD), September 2011.*

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