

Food Security and Nutrition Information and Knowledge Management in Case of Cambodia

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ABSTRACT

Coordination has been identified as a concern in the cross-cutting issues of food security and nutrition (FSN) in Cambodia. Food Security and Nutrition Information System (FSNIS) in Cambodia is the only “entry portal” to support policy formulation and decision-making with regard to FSN. While this knowledge and information management system has earned a respectful reputation, Council for Agricultural and Rural Development (CARD) faces many challenges in the implementation of the system. This paper will present how FSNIS has been developed and impacts on policy or strategy related to FSN. In addition, sustainability of the system is a key challenge for FSNIS; yet it is interesting to see how it works. Along with a success story, FSNIS is recognized by its stakeholders as the most successful knowledge and information management system in the field of FSN in Cambodia.

Key Words: Food Security, Nutrition, Information System, Knowledge Management, Information Management, Cambodia.

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1. Introduction

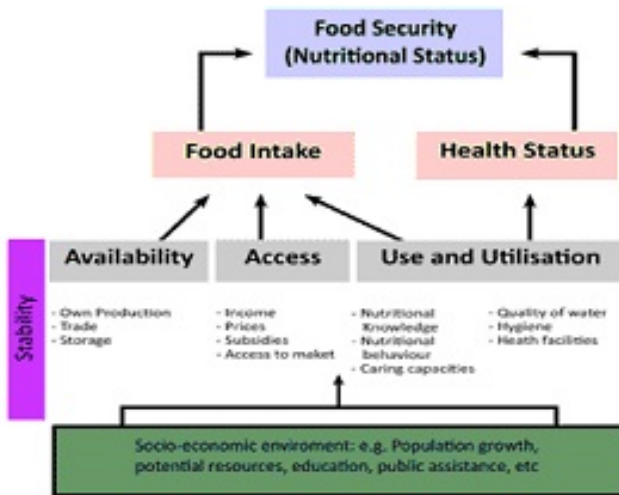
Cambodia is still deemed as one of the least developed countries in Asia and is one of the most food insecure countries in Southeast Asia at 18 percent in 2007 and 30.1 percent of population living under poverty line in the same year (CARD 2004). The cross-cutting issues of Food Security and Nutrition (FSN) are regarded as priority issues in Cambodia. The Council for Agricultural and Rural Development (CARD) has been established by the Royal Government of Cambodia since 1998. Then CARD was delegated the coordinating task on the cross-cutting issues of FSN by the Royal Government of Cambodia as stated in the circular No. 05 resulted from the National Seminar on Food Security and Nutrition on 21–22 April 1999. According to Proposal for a National Web-based Information System on Food Security and Nutrition initiated by German Government Technical Cooperation under “Food Security and Nutrition Policy Support Project” (GTZ/FSNPSP), there was a real need for knowledge and information management portal to coordinate activities and disseminate information on the cross-cutting issues of FSN (Bulla 2005; CARD 2004). Due to the lack of coordination effort in FSN field, FSNIS, thus, plays a crucial role in coordination and policy support in Cambodia. FSNIS was established in 2003 and was officially launched the system in August 2004. Essentially, FSNIS is based and maintained by CARD with technical and funding support from development partners. Without coordination effort of CARD, FSN practitioners/institutions within and outside Cambodia could not exchange, build and preserve, and disseminate knowledge for long term use. This paper will provide responses to critical questions: why is Food Security and Nutrition Information System (FSNIS) important to Cambodia? How was FSNIS developed and utilized by FSN stakeholders? How do we define implication of FSNIS on policy support implementation? What is the way forward of FSNIS?

2. Methodology

This paper will review on important documents of FSNIS as secondary data collection for the case study. The documents are presented in the references section. Additionally, there is a small group discussion face to face with persons in charge of the system. Then the above critical questions mentioned will be answered through background of FSNIS followed by the concept of FSN, development process and institutional arrangement of FSNIS, and objectives and expected output. Afterward, we will concentrate on the implementation and promotion strategy of FSNIS. Recommendations and conclusions will be presented in the last section of this paper.

3. Food Security and Nutrition Concept

Food Security in terms of nutritional status covers on the aspects of sufficient quantity and quality, safety and culturally and socially acceptance. Plus, Food Security is deemed at three different levels: micro (individual, household, etc...), meso (village, district, etc...), and macro (national, regional, etc...) levels. Put differently, this means that Food Security can be fulfilled by the dimensions of food availability (food production, trading, and storage...), food access (income, prices, subsidies, market...), food use and utilization (nutritional knowledge, caring capacities, quality of water, hygiene...), and stability of all the availability, access, and use and utilization dimensions (Gross et al. 2000).



〈Fig 1〉 So, what is FSN? FSN is given a definition that “When all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, and to meet their dietary needs and food preferences for an active and healthy life.” (Herwig 2000)

Nutritional status of population manifests the outcome of Food Security, which is all based on the elements – availability, access, and use and utilization. Nutritional status of population does not refer to Food Security in the country as a whole (Klaus 2005). This means that even with some parts of the country have food surplus, still there are some people facing food insecurity, meaning poor nutritional status.

Exclusively we would elaborate in detail on the elements of FSN. First and foremost, availability of food refers to existence of the food whether it comes from their own production or from the market in order to ensure household or all individuals have sufficiency of food. In addition, access to food defines on assurance of household and all individuals can get nutritious and sufficient food. In other words, access to food depends on level of household and individual resources

such as capital, knowledge and labor in order to generate certain income plus their own production to meet nutritious and sufficient food. Thirdly, the use of the food focuses on consumption of nutritious food in household based on socioeconomic and biological aspects. Moreover, it also ensures the allocation of food and appropriate food intake, especially for the children and mother, within household. In the Utilization of food aspect, it stresses on perspectives of hygiene, including water and sanitation in order to avoid diseases. Hence, not only knowledge and behavior of food preparation is a very important aspect in utilization of food, but also the health-care capacity, behavior, and practices are important to individuals. Last but not least, Stability refers to periodical aspects of Food Security. In this sense, stability identifies causes of long term (chronic) and short term (transitory) food insecurity such as lean season (transitory food shortage season) or civil war/conflict (leads to chronic food insecure)(CARD 2004; Gross et al. 2000; Herwig 2000; Klaus 2005).

4. Food Security and Nutrition Information System History and Institutional Arrangement

FSNIS has been structured into both languages English and Khmer and is based in CARD since 2003. Including, FSNIS has been regularly replicated into CD-Rom to disseminate to stakeholders lacking of internet connection, particularly stakeholders at provincial level. Moreover, CARD, a government coordination body on FSN, has contributed to five permanent government officials and space of office for maintaining the information system. As a partner, development partners provide funding support for operational cost to run FSNIS. To be more specific, development partners are German Government Technical Cooperation (GTZ), Food and Agriculture Organization

United Nation (FAO), World Food Programme (WFP), United Nation for Children Fund (UNICEF), European Commission (EU), and World Health Organization (WHO)(CARD 2004).

Notably the operational cost of FSNIS is about \$20,000 USD (Twenty Thousand US Dollars) to cover the basic operation. Previously, GTZ was collaborating with CARD to support FSNIS for establishment and operational costs from 2003 until December 2005. Then FAO under the FAO–Netherlands Partnership Programme (FNPP) continued supporting FSNIS from January 2006 to December 2007. The basket funding method initiated by FNPP indulges FSNIS in receiving a continuous support up to December 2008. In other words, FAO, WFP, WHO and UNICEF joint together to support budget of certain activities in implementation. FAO, seeking funding from FAO Multi–donors Partnership Programme (FMPP), supported FSNIS from January 2009 to March 2010 (CARD 2004; Sokha 2009). Currently, according to National Coordinator of Linking Information and Decision Making to Improve Food Security of European Commission and Food and Agriculture Organization (EC/FAO) Food Security Programme, there is joint funding between FAO and WFP to support FSNIS from June 2010 to April 2012 (Kosal 2010). Eventually, FSNIS is interesting to many development partners due to the fact that it is the only government “entry portal” with regarding to FSN in Cambodia.

5. Food Security and Nutrition Information System Objectives and Expected Outcomes

Like no other FSN related systems, FSNIS is intended to be information and knowledge management system in Cambodia with regard to FSN. It has been established as the only governmental

web-based information platform with specific objectives. Firstly, FSNIS is developed to support the bi-monthly National Food Security Forum, chaired by CARD and WFP, and the Technical Working Group on Food Security and Nutrition, chaired by CARD, Ministry of Planning, and WFP, held at the Office of Council of Ministers (CARD 2004). The forum will allow decision makers, policy makers, and practitioners to discuss on issues of strategy/programme formulation. Furthermore, FSNIS supports country wide dissemination FSN related information as well as a repository of knowledge, lesson learnt, best practice, and innovative approaches. Thirdly, FSNIS provokes discussions for policy briefing and facilitates the duplication effort avoidance for projects/programmes implementation in relation with FSN. Then another objective is more important to build and strengthen capacity for governmental official at national and sub-national levels through FSN training programs. Last but not least, FSNIS provides stakeholders updating news/events, meetings and workshops, documents, links to other websites, and projects/programmes profiles related to FSN in Cambodia.

6. Promotion and Facilitation of the Use of Food Security and Nutrition Information System

To have a widely use of FSNIS, it provides three dimensions of interaction strategy - system, face-to-face, and strategic partnership (Sokha 2009). In the system-wise point of view, FSNIS support team must be proactive in updating the system as more frequently as possible. This is a key strategy of raising values of information system based on the recommendation of the 2nd Examination of the Stakeholders' Usage of the Web-based FSNIS on 15 June 2007 (Bulla 2007). Apart from the above mentioned point, another FSNIS vital key strategy for the promotion and facilitation of the use is to

conduct brief presentation in workshops or seminars and for national and international non-governmental organizations at national and sub-national levels. Raising awareness of the system to stakeholders through face-to-face interaction leads to a strong support and widely use of the system. Third strategy of promotion and facilitation the use of FSNIS is to build partnership with other information systems and its stakeholders by providing repository place for their organizational static websites to be hosted on FSNIS. Then FSNIS team will provide support on technical issues of website development. In fact, FSNIS team has clear outline of each strategy to be promoted. As a result, FSNIS increases number of visitors on average from 15,979 in 2005 to 18,611 in 2008 and 21,979 visitors in 2009. FSNIS collected link 117 websites, 576 documents, 39 organization profiles in both English and Khmer, 146 FSN related project profiles, 141 Nutrition and Homestead Food Production project profiles, and 3 hosted websites from partners (CARD 2004).

7. The Comparative Strength of Food Security and Nutrition Information System

After understanding of the promotion strategy, we suggest to see how FSNIS differentiates itself from other related systems. FSNIS offers different nature of system from others related systems such as CAMINFO, AIDOC, and Health Information System. To be more detail, CAMINFO was developed by National Institute of Statistics of Ministry of Planning in Mar 2004. It is a statistical data of socio-economic focus on many thematic fields like Agriculture, Education, Transport, and so on... in Cambodia (Statistics 2010). AIDOC was developed by Ministry of Agriculture, Forestry, and Fisheries (MAFF). It is a thematic system only for Agriculture sector of MAFF (AIDOC 2010). Similarly, Health Information System was developed by Ministry of

Health in July 1992 and it was reviewed several times in 1996, 1999, and 2003 (MoH 2008). As a result, it is noticed that FSNIS works in different way in coordination effort on cross sectors and it is user-friendly web-based and the most updated Information System in Cambodia.

FSNIS evidently demonstrates to be the only existing and comprehensive information platform for FSN sector in Cambodia. In addition, FSNIS is based in the governmental institution for maintaining the system. This means that the commitment toward sustainability is proved from government side to support the growth of the system. Currently, FSNIS is in full operation by permanent and trained government staffs of CARD (Sokha 2009). According to the statistical application tracking hits and visitors, it is already confirmed that FSNIS is largely used and is increasing of its users from years to years. More important, FSNIS plays as an instrument to support the FSN Forum and the Technical Working Group on FSN to provoke discussion among FSN stakeholders for policy briefing and strategy formulation. Last but not least, FSNIS is strongly supported by FSN community, especially the development partners working on FSN. Recently, FSN community has formulated the Food Security and Nutrition Information Taskforce consisting of several types of information systems – data analysis system, presentation data system, and dissemination data system, which were developed by different line ministries. Information Taskforce agreed to identify clear role and responsibility of each system in order to promote the use of the information systems, the taskforce keeps FSNIS as disseminating information system related to FSN (CARD 2010).

8. Challenges and Recommendation

Experiencing the shortcomings during implementation process, FSNIS is notified some challenges - funding support, limitation of staff capacity, and FSNIS administration approaches. Primarily, the sustainability of funding support is still at doubt even though the strong support from development partners is still on-going (Sokha 2009). This means that FSNIS needs to keep looking for funding support from development partners. Secondly, capacity building is very important to improve the efficiency and effectiveness of FSNIS implementation. Next, the modification on methodology of approaching to FSN community by FSNIS team is needed to change from institution targeting to project/programme targeting (Bulla 2007). Although FSNIS deserves as a successful information system, there are still important recommendations to improve efficiency and effectiveness of the system. The second examination of stakeholders' usage strongly suggests five recommendations - FSNIS target population, accessibility, promotion, response, and identification of user demand - to augment the use of FSNIS (Bulla 2007). Consequently, FSNIS is redesigning its work plan, including recommendations from the second examination report to enhance the performance of FSNIS.

9. Conclusion

Knowledge and information management is a vital mechanism to support the policy discussion and knowledge preservation. In the case of FSNIS, it is recognized as a successful knowledge and information management system with regard to FSN field in Cambodia. Three implications of FSNIS on policy have been identified - policy support, knowledge strengthening, and knowledge repository - in order to help

improve the decision-making of policy makers or decision makers in the sector of FSN in Cambodia, FSN community has formulated the FSN Information Taskforces, chaired by FSNIS/CARD, in which combine data analysis, data provider, and data user systems. Finally, FSNIS' s experience and success story on policy implication can be shared to other countries with similar situation of FSN development. With evidence, the experience on knowledge and information management was already shared to Laos PDR in the workshop on “Coordination and Mainstreaming FSN into Socio-economic Development Plan 7th” on 20–23 July 2009 in Laos PDR. Knowledge and information management system on Food Security and Nutrition strongly supports policy making and strategy/programme formulation to reduce poverty and fight food insecurity.

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