

## **IV-3: The Early Warning System and Food Security**

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### **1. Main Aims of the research**

In order to identify and clarify the crucial factors which are likely to lead the devastated situation of food insecurity in Africa, this research will focus on the “early warning system” of drought preparedness and food crisis. In particular, instead the early analysis based on the conventional data collection, the alternative analysis that attempts to examine the political and social causes of food insecurity seems to be one of the key factors to understand the resilience of the rural society to food crisis.

### **2. Abstracts of the research**

The purpose of this research is to analyse political and social elements which lead to food crisis and social vulnerabilities in Africa, as well as to seek some potential correlation between those elements and the local resilience in the rural society. The preliminary research on current debates of food security in international societies reveals that it is essential to identify the early warning indicators implying political and social elements of food insecurity in addition to ecological indicators as initial causes of famine and food crisis in sub-Saharan Africa. Moreover, in Zambia, we will investigate how the mechanism and the indicators of the early warning system can be effective in scrutinizing resilience framework of rural society which is fragile to the food insecurity.

### **3. What We have done this year?**

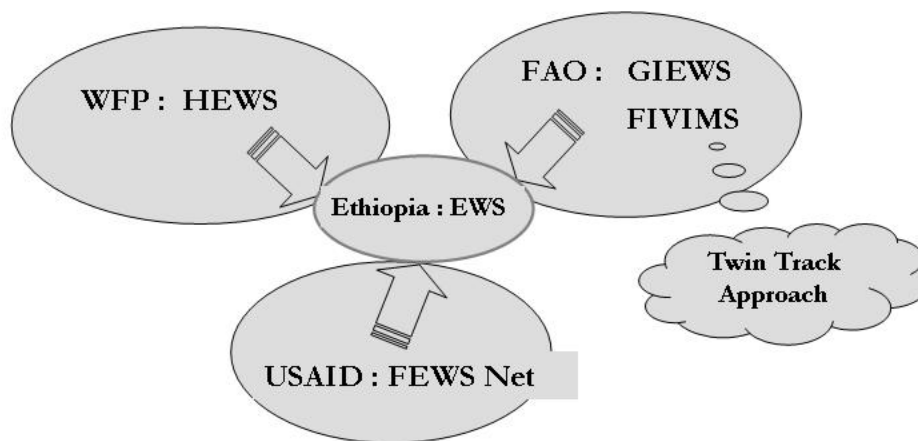
***: Preliminary research on the Early Warning Systems provided by international organizations and African countries***

As a preliminary research, we have focused on the early warning systems provided by international organizations (such as FAO and WFP) and African countries (see Figure1). Exploring causes of vulnerability to famine and food shortage in rural areas over Africa, the implementation of achieving food security generally imply the three types of frameworks; emergency relief aid, rural development assistance, and early warning system (FAO, 2005). In the research, it is largely notable to focus on the role of the early warning system which can provide its role of prevention, preparedness, response toward famine and food crisis. Thus, ensuring food security for rural people seems to be equivalent to pursuing their individual human security which consists of district and

national level of human security.

International society has established several early warning systems so far, including HEWS (Humanitarian Early Warning System) for food aid distributed by WFP, FEWS (famine Early Warning Systems Network) for development aid supported by U.S. government, and GIEWS (Global Information Early Warning System) for disaster aid by FAO. Particularly, FAO has a big effort in taking new approach called “Twin Track Approach (TTA)” which justifies the interaction of functions of food security. Furthermore, international donors support developing countries to correctly operate endemic early warning systems, including Ethiopia, applying their expertise at both institutional and individual level.

### Early Warning Systems provided by international donors



WFP: HEWS ( Humanitarian Early Warning System ) for emergency food aid

USAID: FEWS ( Famine Early Warning Systems Network ) for development aid by U.S.

FAO: GIEWS ( Global Information Early Warning System ) for disaster relief

Figure1 Early Warning Systems provided by international donors

The Twin Track Approach has been recently provoked in the emergence of reviewing and re-addressing the perceived challenges of food crisis. It is also aims to achieve the sustainable growth of developmental interventions to poverty. Firstly, food crisis can be seen as political by nature, because it might be occurred by the lack of national policy and institutional capacity to implement the preventive programmes. Secondly, FAO is changing their principle from “Seeds and Tools Approach” to “Crisis Management Approach”, focusing concept, strategy and action of food crisis response. Lastly, enforcing food security is getting first priority among Millennium Development Goals (MDGs) agenda.

The TTA contributes to rebuilding the resilience framework in rural society, which results in making existing early warning system more effective (Pingali and et.al, 2005). In other

words, discussing the two focal points would be helpful to percept the rural vulnerability and to identify the elements of resilience framework (see Figure 2). On the one hand, strengthening both productivity and incomes would positively help recovering measures of rural livelihoods. On the other hand, granting direct access to food and social safety nets could provide immediate support to vulnerable people. That is, the process of reconsidering elements of the resilience framework would be one of the key factors to provide more sufficient and sophisticated early warning system available to affected people and international donors. In any protracted crisis, while these are new agendas for FAO, it is vital that they identify existing political and social factors and possible way to overcome the current limitations of response mechanism.

### Twin Track Approach and Resilience Framework

**New resilience framework includes political and social elements of TTA**

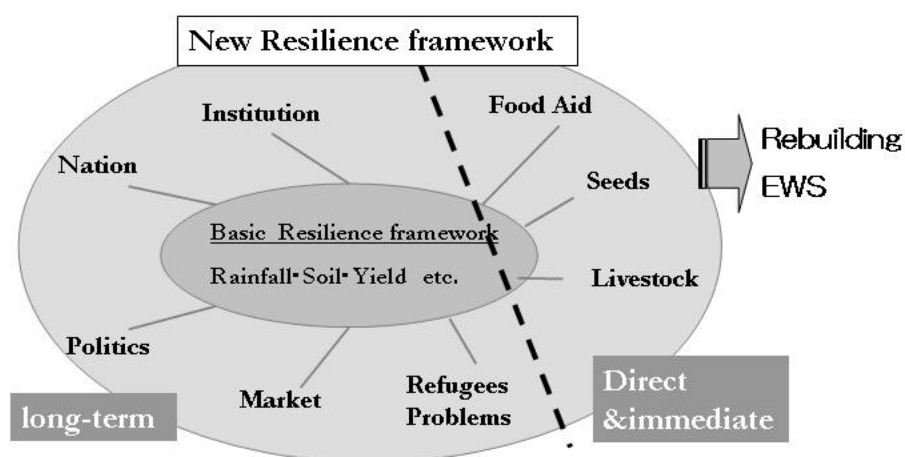


Figure 2 Twin Track Approach and Resilience Framework

As an initial case study of local early warning system in Africa, we have focused on the case of Ethiopia, which has a relatively sophisticated mechanism and a long history of early warning system among sub-Saharan Africa. It is obvious that Ethiopian government and international organizations cooperatively assigns the highest priority to prevent famine leading easily to food shortage in the drought-prone country (Disaster Prevention and Preparedness Agency, 2004). Therefore, the disaster prevention and its management have been facilitated in the two directions, relief aid and development assistance, when they face the forcible situation of serious food insecurity. Simultaneously, disaster reduction programmes are designed to address the causes of poverty, which in turn is the underlying causes of vulnerability to disasters (Getachew, 2005). Moreover, Ethiopia has tried to establish an effective early warning system to gather local information and to analyse it for famine preparedness, at the level of nation, region, zone and Woreda

(district). In fact, the data collected by the district officers would be more reliable to clarify the peculiar indicators of early warning analysing, being compared with the rough data collected by international organizations, including FAO or WFP. Their approach to analyse those indicators, however, is still mainly based on the conventional data collection without paying much attention to political and social factors.

To promote establishing better functional early warning system in Ethiopia, the perception of TTA would be an alternative strategies of addressing the causes of food insecurity. For example, the elements of new resilience framework imply lacks of capacity in the government and institutional faults could be political factors of food crisis, despite they have the healthy ecological conditions of food production. On the top of that, nowadays, the inflow of refugees into disaster-affected areas would be considered as a destructive trigger of facilitating food shortage in Africa.

#### **4. Outcomes and Further Challenges**

The preliminary research on international organizations related to agriculture and food aid reveals that they has a common understanding of the noticeable significance of the early warning system to perceive political and social causes of food crisis in famine-prone areas such as sub-Sahara Africa. In fact, those organisations have tried to provide their own efficient system and new concepts with international policy-makers and program-makers of food aid.

However, in the current context of the complex insecurity situation in which local people would be forced to be out of access to food, not only ecological conditions but also political and social conditions required as triggers provoking food crisis need to be closely considered. In fact, the actual early warning system in Ethiopia, which has a relatively good reputation among African countries, has not successfully adopted the political and social indicators as suggested by international organizations.

In other words, given that the rural societies in sub-Sahara Africa is likely to be affected by social system they have, it requires the further researches on the socio-political institutions at the local community level as well as the national policy level. In addition, new elements of food security in poverty-eradication efforts, including the African countries and international organizations, should be examined more in detail as potential indicators of early warning system and resilience framework of rural society to food crisis.

#### **5. Research Proposal**

***Theme:***

“Political and social factors of famine and food crisis in rural Africa  
: a multi-level analysis on early warning indicators of food insecurity”

***Aims:***

The research will positively identify and estimate political and social causes of food insecurity, analysing indicators of early warning system in sub-Sahara Africa, especially in Zambia, in terms of the national policy level as well as local community level, which might imply essential influences to vulnerability and resilience in rural societies.

***Contents:***

Political and social elements consisting the resilience framework of rural society will be identified and examined by documentation research analysing the indicators of early warning systems of the several African countries vulnerable to food crisis. In particular, the field research in Zambia also contributes to discovering some social elements of resilience in rural communities, which would be unique and unexpected, referring to those indicators possibly related to national and international policy of food security. The research will have the following focal points.

A. Categories of indicators of early warning system implemented in Africa

- What are considered as initial (early) indicators of early warning analyzing (eg. Ecological conditions) in African countries?
- What kinds of risk factors are now adopted by African countries as important elements aggregating the food insecurity?
- What difficulties are pointed out to expect the outcomes (late indicators) by analysing social and political indicators?
- Which indicators would be much related to social factors of food insecurity?

B. National and international policy of food security in Zambia

- What is the national principle and policy of food security in Zambia?
- How international organizations, like WFP, FAO, USAID and WB, intervene the rural development? What is the mainstreaming agenda among them?
- How the national and international agencies can be interacted?
- How the above policy and implement can give any impact (food aid, development policy, early warning system) on rural society?

C. Local practices and social elements of resilience in rural Zambia

- What kinds of social structure of local communities are established for food crisis?

- What is considered as indicators of food crisis by people?
- What kinds of endemic customs and skills to survive are practiced among the local people?
- How is the situation of rural development and food aid in rural Zambia?
- Which social elements of resilience framework in rural Zambia can be identified, focusing on the relationship with national and international policies of food security?