

**Experience of Compliance to GAP;
Initiative of Cluster of Western GAP in Thailand**

Dr. Roongnapa Korpraditskul
Deputy Director of GAP Cluster
Kasetsart University, Kamphaengsaen campus, Thailand

Background of Agriculture in western region, Thailand:

Thai agricultural and agro-industrial products accounted for 25.1 percent of the total export. The expansion of health concerns is projected among these products in 1998. Recent years have seen moderate growth rates as Thailand's primary rivals encountered climatic effects due to the El Nino phenomenon. Demand for farm products in the world market will increase this year.

Like the manufacturing sector, Thailand's agricultural production also relies greatly on imported contents, especially frozen marine products, animal feed, dairy products, timber, fertilizer, pesticides and farm machinery. Imports of raw materials and capital goods for agriculture during 1993-1996 grew continuously from US\$ 5.6 to 7.4 billion, an average yearly growth rate of 7.8 percent. In the first 9 months of 1997 imports stood at US\$ 5.3 billion, up 8.3 percent from the same period in 1996. The top import items were fish meal and oil seed for domestic animal feed production, rising from US\$ 1.06 billion in 1993 to US\$ 1.5 billion in 1996, an expansion of about 12.2 percent a year. These imports stood at US\$ 1.23 billion in the first 9 months of 1997, up 20.8 percent from the same period in the preceding year.

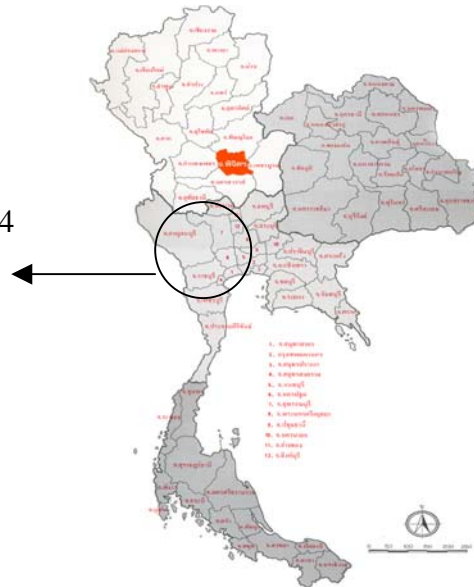
International standards for farm products from Thailand are another overriding concern among exporters. There is no strict and effective supervision controlling agricultural production in Thailand. As a result, the nation's trading partners could ban Thai farm products by referring to international health standards. Annual production volume is rather uncertain since local agricultural practice still relies very much on climatic conditions. Modern technology is certainly needed to provide sufficient water for irrigation, and to ensure quality control, especially in harvesting activities. Government policies are critical in this respect. Actually, government subsidies and timely intervention are essential for agricultural goods. Import quotas should be enforced and exports facilitated to encourage farmers. The urgent problem of labor shortages must be seriously addressed, especially in fishing and the production of para-rubber.

As Kasetsart University is well known for the agriculture, the campus located in the western region had stated mission for the development and research for building capacity of agricultural system. As the western area is suitable for vegetable production, we concern for export produce, i.e. asparagus, chili, baby corn and okra. The area of production covered 32,200 ha. This boundary was justified for finding the fact GAP and gap of agricultural culturedwelling in the area.

Objective Area
The Cluster of Western GAP Region incl. 4 provinces

- Nakhon Pathom
- Ratchaburi
- Kanchanaburi
- Supanburi

total vegetable plantation area 220,000 rai
(35,200 ha)



Small and medium holding business of food sectors and supply chain are distributed within the area. The technology from outside community is not well disseminated among the small holding business sector in this country. Probably due to many factors i.e., legislation is lagged behind, the inefficient enforcement of law from governmental officer, the low consciousness of consumers on quality, non-participatory in social concern etc. These classical patterns of the business sectors are prevailed not only in western region of Thailand, but around the country.


International trade Regulation and National Requirements: Local government has encouraged all related organizations to arrange on food safety promotion and extension. The established measures based on international standards affected fruit and vegetable production chain in the western area, especially for the exporter. The well-known requirements were EUREPGAP certification, HACCP, GMP and risk analysis. It is the big challenge for exporters to be pioneer to cope this challenge, yet on their own struggle with a high competition among exporters within the area.

In 2004, GAP issued by DOA was developed; it is stated as voluntary standard. The Ministry of Agriculture and Cooperatives promotes and encourages growers to comply with GAP Guidelines. Various regulations were issued to ensure that produced food will be safe.

Currently, not only pesticide contamination, there are also microbial contamination rising. The notification issued from the Department of Agriculture (on 18 August 2005) required that vegetables (coriander, stinking, holy basil, sweet basil, ka-yang, peppermint, pak-paew and challot) export to EU countries must bear certificate of analysis of *E. coli* and *Salmonella* spp.

Cluster of Western GAP Initiatives: Based on the research project granted by Thailand Research Fund, we set up the meeting for stakeholder to find step forward to the cluster competitiveness with the goal of food safety and quality for the fresh produce. The topic discussed at the first day was to learn the idea of cluster competitiveness raised by consultant from KENAN institute in Thailand. Based on the concept of cluster competitiveness, was being known that it is the process of development in the group of stakeholder concerning their core business. As the existing business is running independently on their own, the mechanism to facilitate

their mutual interest is required. These processes are called developing process to bring the relevant stakeholder to share their experiences and idea to analyze constraint and find the solution and way to achieve that goal.

In year 2002, GAP cluster group member was gathered from the western area emphasize vegetable production in the western area, consist of 4 exporters, collectors, 90 farmers and 5 farmer group leader. Thereafter, the meeting was set up once in a month to learn the problems and constraint among fresh vegetable business, all through supply chain. In every meeting and discussion, sudden problem always occurred, mainly from the government regulation and some part from the slow development of the farmer which means that farmers do not want to change their regular activities as long as they can sell produce to buyer either in the export market or local market. At the time being, the ways to achieve goal are too many to be manageable. We seemed to get deeper down to the problem sink, at that moment some conclusion from small group meeting lead to the solution that we must have the common GAP of our own cluster member ; 

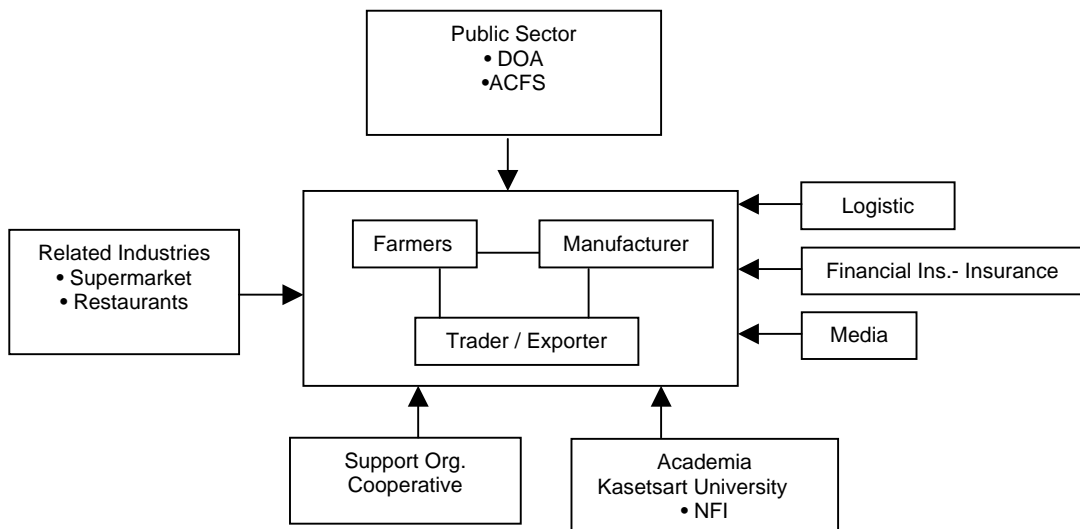


Fig. 1 Stakeholder analyzed by expert from cluster initiatives consultant

Policy Level : The objective of cluster GAP is to produce good quality and safety vegetable for export and to domestic market. Cluster intends to promote Good Agriculture Practice among farmers in the western region. To serve this objective, cluster set up policy;

1. Develop acceptable and practicable GAP for crops in western region
2. Establish database of farming area, production, sales etc.
3. Knowledge distribution to agricultural stakeholder, especially farmer and community leader, government officer and agricultural professor and specialist
4. Build up food safety and quality awareness to farmer and consumer through various means e.g., printed media, executive interview, radio, news etc
5. To be center of food safety and quality by supporting information about farmer, trader, agricultural production and marketing situation, new agriculture regulation and requirement to export and others.

Common Interest of GAP Code of Conduct: The Key Development

Thai governments (by Ministry of Agriculture) launched the policy of Food Safety Year in 2004. Good Agricultural Practice in many commodities were published and distributed for implementation under the responsible department i.e., Department of Agriculture, Department of Fisheries and Department of Livestock. There are activities and key process index was assigned that the growers and farmland will be certified at the number 350,000 farm in that food safety year.

GAP cluster in western region considered that, the goal is to promote the production in the area to be safe and be high quality under the control measure by our own system. Based on experience and knowledge sharing between university staff and exporters, the system of quality assurance at farm level within each company was categorized and compared for the best practice. Cluster brought farmers together and learned for their normal practice and then categorized the problems and constraint against GAP both GAP of DOA and EUREPGAP.

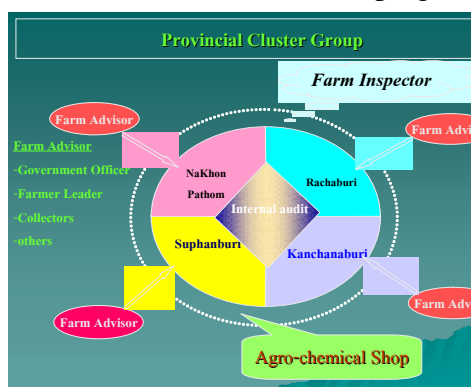
EUREPGAP is considered as a pattern to be complied due to the wide and sound scope and easy to access to market. There is some hidden objective from the working group that, it seems challenging to change the nature of farmer's practice. At some sense, some education program to farming agriculture will be changed to be more sustainable in the same vicinity, certainly, based on appropriate knowledge at local community. With the strongly support of science, research and information transfer.

The attempt to produce common cluster GAP in Thai language had been carried out within 3 months. Any part which is not applicable to the normal practice was deleted; scientific reason was search to understand the EUREPGAP and Thai government GAP. In the context of EUREPGAP and Thai GAP, we categorized the relevant issue concerning food safety as the priority. Mechanism of cluster worked efficiently at this step. Experiences were drawn from technical staff from exporters, sharing ideas among farmers and encourage working in a group. The key objectives are to understand, simplify and short cut, emphasize appropriate knowledge for each level of interest.

Provincial Strategy Initiatives: Year 2003-2004, Grant from Provincial Project was brought to support activities and strategy.

The training programmed and quality assurance implementation to farmer group

The module of training stakeholder was established. Identification the group of producers as, farmer, farm leader, farm advisor, farm inspector. GAP of EUREPGAP was again adapted to checklist. There are some constraint due to some lack information in the region, so the necessary information was gathered. The most difficult part to implement in farmer group are to make understand about documentation and record keeping.



Four Program were developed to synergize and focus GAP activities and put policy into practice at provincial and local levels.

- Agriculture chemical – Green Shop
- Training Program
- Auditing : Inspection Program
- Public Relation & Communication

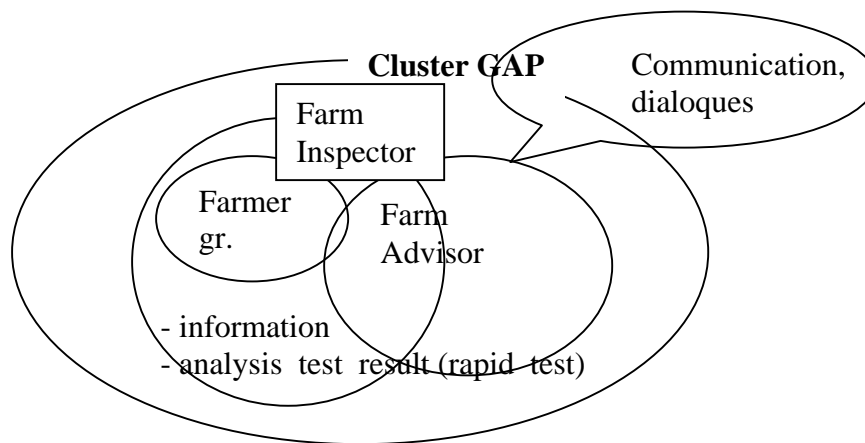


Fig 2 Cluster of Western GAP Model : quality assurance implementation to farmer group

The training course, knowledge based practice: Checklist of western cluster implementing to small farms suggesting the lack of understanding of good practice under quality assurance system. Step by step of implementing, the training courses are now under developed, simplified to be appropriate for the region. We are now under the process of bringing our process to be recognized internationally, yet under the understanding and collaborative with national authorization.

Accessibility to market: Market place of Thai agricultural commodities can be categorized into 3 cases i.e.; 1. Direction to foreign market especially supermarket, this portion may go to local supermarket. 2. Direction to restaurant and grocery in foreign country 3. Direction to retailer and wholesaler in foreign country. The last two groups of commodity require systematic and quality assurance implementation.

As modern market like Tesco Lotus, Carrefour, Big C, Tops Supermarket are located in big city and expand to dense community, modern people are able to buy grocery from air-con market. However, the fresh market or wet markets still exist to serve for the local or working people in Thailand. Local consumers believed that food must be safe due to the responsibility of the government. Consumers still select the produced based on the criteria of freshness and appearance.

However, some health shop and health activities members are available at some places. These markets are welcome for the safe produced, of course, with the reasonable price. Fortunately that some market places strongly support and promote health concern i.e., MK restaurant, Eden health shop,. Green line health shop etc.