## Abstract

The Action Research on comparative organic and non-organic smallholder farmer: case study Tambon Kammad, Kudchum District, Yasothorn Province. This research has been developed research's objectives for the Towards Organic Asia (TOA) programme with The Sustainable Agriculture Foundation (Thailand) and Alternative Agriculture Network (AAN) which is nationwide partnerships. Under cooperating to developing research problem in farm households and community level, the research applied literature review, in-depth interview 3 case studies of organic farming, and also 3 case studies of Conventional farming. Furthermore, questionnaires survey on 14 organic farming household and 14 conventional farming household which total 28 household had launched during 1 June – 30 October 2015.

The research design emphasis on Participatory Action Research (PAR) which based on participation in decision making of community in every research process, namely developing of framework of the data collection, setting and building up capacity data collection teams, also data utilization. By these methods, the community can take the benefit to develop the potential of the community from the beginning of the research process, until has the ability to bring the research finding to apply and integrate in community plan.

In addition, the research's concept rely on well-being concept which categories into 9 domains as following; 1) Economy/income/livelihood, 2) Health, 3) Ecology/biodiversity/ environment, 4) knowledge/education, 5) Governance/politics/justice, 6) Time-use, 7) Culture/spirituality/friendship, 8) Self-evaluation, 9) Community vitality. These concepts were used to compare with the research findings. In respect of area study, Tambon Kammad located in plain witch upland area, but in some villages, such as Ban Kud Hin, Ban Kam Mad, Ban Non yang, there are variety of land area and utilization. There reflect land utilization according to the differentiation of ecology.

The research finding from 28 questionnaires found that, comparative income between organic farmers and conventional farmers, the organic farmers had high income than conventional farmers in all farm activities including, paddy farm, livestock, and hired workers. Interestingly, organic farmers have income almost one fold than conventional farmers per years, 106,642.90 baht comparing with 59,230.80 baht. In term of hire, organic farmers also have high wage than conventional farmers. This was explained by the case study those organic farming households can support their children to high education, these children can get high income because they work in skill labour or off-farm sector.

By average, cost of land rent in organic farming is equal with conventional farm. Cost of harvesting, organic farming is a little bit higher than conventional ones, but cost of chemical fertilizer, pesticide, and herbicide in conventional farming is precisely higher than organic farming. In respect of cost of rice seed, conventional farming have cost burden one fold of organic farming. According to questionnaire survey applied household level analysis, considering cost of labour in organic farming is higher than conventional ones, because in fact agricultural system is not always combine his own and family's labour in cost of product so the research can interprets that organic farming can save cost of labour about 7% comparing with conventional farming.

Finding from in-depth interview, 3 cases of conventional farmer, the research found that in part of concept and paradigm of farm household, some farmers know in some part of organic farming, mostly lack of knowledge and farm experiences. Some farmer try to convert to organic farming but still stuck with some obstacles such as economic conditions, debts, lack of skills. For 3 cases of organic farmer, they have motivated to avoid risk of economic instability; moreover, they always keep learning that shape their perspectives and lives by related with value, safe, environment dependency, and also production related to mode of culture. Some of these attitudes can elevate to right of farmer and fair-trade movement. Some of specified farmer can critique on government policies, some take part to mobilize in policy and power negotiation.

For mode of production aspect, conventional farmer focus on intensive production both in and off farm, also the strategy to keep their income in off-farm sector and food security. In part of organic farmers, they apply the production strategy to create the root of food security, and also earn income in balance ways both in and off farm sector. Furthermore, farmers facilitate intensive production strategy to make money throughout the year by emphasizing on safety and justice.

Combining domain of well-being concept with field study's findings, the conclusion on the potential and quality of life comparing between organic agriculture and conventional agriculture are as following;

| **Domains of well-being** | **Issues** | **Organic agriculture** | **Conventional agriculture** |
|---|---|---|---|
| Economy/ income/ livelihood | Product | Low yield in the beginning, high yield in the long run. The longer time, the higher intensive production. | High yield in the beginning, low yield in the long run. The longer produce, the less productivity. |
| | Economy | Reduce costs (maximize the resource in the farm), earn more income (better organic prices' product, additional income from after-harvesting crop) | High cost of production, need to buy every materials, stuck in the debt cycle. |
| Health | Healthiness | Healthily, no risk from toxic chemicals. | Weak, due to exposure to toxic chemicals. |

| Domains of well-being | Issues | Organic agriculture | Conventional agriculture |
|---|---|---|---|
| Ecology/ biodiversity/ environment | Environment | Soil, water, air is not contaminated with the poison | Soil, water, air, is contaminated. |
| | Climate change | Organic farming can absorb $CO_2$, also select suitable genetic to persist climate change. | Modified rice seed from company and also government sector is not resist from disease. Facing with climate change lead to need more taking care of and less productivity. |
| | Bio-diversity and genetically resource | Variety of genetic, apply their ability in seed selecting, and also sharing seed for cultivating. | Buy seeds from shops, cannot use their own breeding. |
| Knowledge /education | Learning process | Learning center and learning space to link practitioners and scholars creating learning culture. | Not interesting in learning process, less participating in learning activities since focusing on economic benefit. |
| | Concept of holistic | These groups interests concept of holistic, system which is linked to everything. | Conventional group concern in machinery and separated things paradigms. |
| Governance/ politics /justice | Policy movement | Realizing in the important of policy, concerning that need to help each other. | Consider that policy is not their business, cannot take any benefits. |
| Time-use | Behavior about working | Work on the farm all day. | Depending on convenient. |
| | Public activity | They can manage time for volunteers' job and farms efficiently. | Mostly, lack of public participation and always spent time with their jobs. |

| Domains of well-being | Issues | Organic agriculture | Conventional agriculture |
|---|---|---|---|
| Culture/ spirituality /friendship | Intellectual and cultural traditions | Belief in spirit, apply local wisdom (e.g. forecasting rain). | Popular in using machinery and modern knowledge. |
| | culture | Agricultural system based on local culture and tradition such as rite of rice or religious ceremony. | Holding plan of framing and situation of economic, mainly. |
| Self-evaluation | Farmers' Rights | High awareness, action to protect farmers' rights. | Less awareness. |
| | Sufficiency | Sufficiency and self-reliance | Non-sufficiency, extravagant, traps in to debt. |
| Community vitality | Group | Set up learning group; participate in making organic fertilizer and marketing. | Individualism. |