Area Based Development Research Journal

Official Translation of วารสารวิจัยเพื่อการพัฒนาเชิงพื้นที่
Thailand Research Fund

Vol. 4 No. 3 January – February 2012 E-ISSN 2408-1752

Area Based Development Research Journal.2012;4(3) Article No. 255501
http://abcjournal.trf.or.th/

A Participatory Action Research to Develop and Transfer Beetle Mealworm Larvae Production Technology in Suratthani Province

Sophol Boonlum

Faculty of Science and Technology, Suratthani Rajabhat University, Muang District, Suratthani Province, Thailand 84100

**Corresponding author's E-mail: sophol02@hotmail.com*

Abstract

This study aimed at determining the most appropriate feed formula for the beetle mealworm larvae, in terms of growth performance, feed costs, and to transfer the results to the community. This study used mixed method of research including participatory action research and field experiments. The data collecting methods were interviewing, group interviewing, stage arguments and group activities to present data by text analysis. The experimental research field study planned to experiment with a completely randomized design on four feed formulae. Each formula involved ten replications. The four formulae were 1) wheat bran, 2) oil palm meal, 3) oil palm meal mixed with rice bran (1:1, w/w), and 4) oil palm meal mixed with rice bran (3:1, w/w). The chemical compositions (protein, fat, fiber, moisture, ash, calcium and phosphorus) in each formula were analyzed, by Proximate Analysis adapted from AOAC (1990) and the total energy was analyzed by ASTM D 5865-02. Technology and skills were transferred to the community by organizing a workshop.

The results showed that the growth performance of beetle mealworm larvae aged 1 to 12 weeks fed with formula 4 produced the highest growth performance, the average weight was 168.4±0.7 mg/body. The crude protein and gross energy composition were highest in the beetle mealworm larvae culture fed with formula 3, which were 18.91% and 2,900 kcal/kg. Material costs of formula 1,2,3 and 4 were 50.13, 35.40, 43.21 and 44.39 bath per kilogram, respectively. Technology and skills have been transferred to 67 farmers. Demonstration farms, one farm per district were established. The successfulness of this research was due to the participation of the farmers in Tombon Wat Pradu. They took part from the collaborative thinking and decision-making stages, also expanding and making plans of action in developing the capacity of the community.

Keywords: -

Area Based Development Research Journal.2012;4(3) Article No. 255502
http://abcjournal.trf.or.th/

The Project of Area Network Development to Enhance Learning Quality of Students in Small-sized Schools, Surat Thani Province

Prayote Kupgarnjanagool

Suratthani Rajabhat University, Khunthalay, Muang District, Suratthani Province, Thailand 84100

**Corresponding author's E-mail: Ajarnden@hotmail.com*

Abstract

The research was a participatory action research. The methodology was a combination between quality and quantity researches. The objective was to build an area network to develop teachers toward students' learning quality development in small-sized schools. The innovation of community educational development had 4 stages. The first stage was the innovation of small-sized schools' network administration or 'to systemize'. The second stage was the innovation of learning management by teachers' development toward students' learning quality or 'to enhance.' The third stage was the innovation of students' quality reinforcement with learning sources such as genius classrooms, volunteer teachers, computers or satellites or 'to support'. Lastly, the fourth stage was the innovation of publicize knowledge to other areas or 'to fulfill.' The research area was the area base 2, involving 8 districts of Surat Thani province. The target population was educational institute network, 13 selected small-sized schools with the total of 547 students from Pratom 1-6, 47 teachers, school headmasters, an area base director, supervisors, a local administrative organization, as well as related public and private agents. Then, the secondary data were collected from documents, textbooks, websites, and related researches. However, the primary data were gathered from area works, minutes of meetings, activity participation, observation, action colloquiums, training test results, and questionnaire answers. The data analysis and synthesis was the classification of research issues. The research framework was the innovation of small-sized schools' network development, which was used to build data analysis framework, and also to examine data for confidence, completeness, and quality. The research found that there was a circle of learning concerning schools, community, learning sources, students, small-sized school network of area 2 in Surat Thani, university network, and wisdom offspring network. This resulted in collaboration and assistance by competency, areas of expertise, and strength points to develop students' learning. In other words, in a school aspect, schools joined LLEN SRU became well-known and gained more trust and reliability from their community. In an administrative aspect, 13 school headmasters exchanged experiences and knowledge all together. In a teacher aspect, they were developed about teaching and learning process, the writing of mix classes learning patterns with child-centered ideas, the use of 2009 primary education standard modules, and the application of knowledge to develop learning innovation and learning instruments. In a student aspect, by the learning assessment, the students got higher score results. In a community aspect, the community acknowledged the importance, cooperated, and participated in education. There were good interactions, satisfactions and understanding of school administration, additionally, the teachers willingly helped and supported in any sections, such as the publicized of knowledge. The LLEN SRU knowledge flea market was hosted for administrative and teachers to join and integrate learning lessons and to make exclusive projects of students' quality development toward each school identity to extend its best practices. Also, there were 13 schools joint projects to develop mixed class modules and assessment tool invention. Consequently, the overall results would be exhibited later on.

Keywords: -

Area Based Development Research Journal.2012;4(3) Article No. 255503
http://abcjournal.trf.or.th/

Research and Transfer Technology for Water Quality Surveillance in Sumlong Canal: In Case of Bangpla Subdistrict Administrative Organization, Samuthprakarn Province

Thitima Ketkaew

Faculty of Science Technology, Dhonburi Rajabhat University, Thonburi, Bangkok, Thailand 10600

**Corresponding author's email : i_gratae@hotmail.com*

Abstract

This research is the survey and experimental research which aimed to transfer water quality surveillance technology and to encourage the awareness in water pollution problem to people, community and local organization. The research methodology combined both qualitative and quantitative researches. The secondary data was collected by reviewing the document. The primary data was collected through questionnaires, and interview, as well as the water quality situation was examined and compared with surface water quality standard. The plans of transferring water quality surveillance technology were defined by brainstorming workshop and transferred to community and stakeholder. This research was conducted at Sumlong canal, Bangpla subdistrict, Bangplee district, Samuthprakarn province. The population in research were 69 people including; representative from 15 villages and local administration officers. The data was analyzed by using descriptive statistical analysis such as percentage, mean, and standard deviation together with data from water quality analysis. The result shown that water quality of Sumlong canal, Bangpla subdistrict is the surface water in class 4. This is suitable for using in industry. In order for human consumption, disinfect and special water treatment process before using were required. The opinions about water quality surveillance in Sumlong canal, most communities do not know in water management and the guidelines to water management by requirement were transfer knowledge, participation in water management, basic of water quality monitoring and use of effective microorganisms in environmental protection and wastewater treatment. Form the result of transferring water quality surveillance technology including; the wastewater management by using effective microorganisms, the campaigning of effective microorganisms for wastewater treatment, and basic of water quality monitoring, the community got the most advantage from lecture. The communities of Bangpla subdistrict administrative organization aware in water pollution problem in Sumlong canal and require participating in water quality surveillance continuously. The communities could apply effective microorganisms in households and transfer to other members in community.

Keywords: Transfer technology, Water quality surveillance, Water pollution, Community

Area Based Development Research Journal.2012;4(3) Article No. 255504
http://abcjournal.trf.or.th/

The Patterns and Roles of People Network in Water Resources Conservation: A Case Study on Pasak River Basin Conservation Network

Wanjai Lamprom

Institute of Research, Dusit Thani College, Pravet, Bangkok, Thailand 10250

**Corresponding author's E-mail: wanjai_n@hotmail.com*

Abstract

This research presented patterns and roles of people's network in water resources conservation, a case study of Pasak River Basin Conservation Network. The purposes of this study were; firstly, to study factors affecting group construction, processes of the group and roles and coordination in water resource conservation; secondly, to study patterns, methods and processing stages for natural resources and environment conservation by Participatory Action Research (PAR). The information obtained from 47 mainstays of people's networks in 5 districts namely Saraburi Province consisted of people's networks in Muang District, Saohai District, Wangmoung District, Chalermbrakiat District and Kaengkoi District. The data has been obtained by making discussion of the focus group and in-depth interview. Then, the Participatory Observation was used in this study for data completion.

The results showed that the group leaders and mainstays were an important factor of group construction of Pasak Basin Conservation. Starting off the community leaders were well aware of environment problems – the quality of Pasak Rover is not usable for daily life as well as water pollution resulted from taking a leap into the industry from agricultural-base. Since the group leaders and mainstays had always communicated with one another, they jointly did various activities integrated with indigenous knowledge for environment preservation such as Longevity Ritual for River and Forest Ordination. The process of the group construction covered making group relationship, exchanging knowledge for group development, managing group, group activities, and searching for group coordination. Recently, the group has been on the process of network construction. The Patterns of People's Network in Pasak River Basin Conservation Network consisted of coordination based on beliefs and ceremonies, periodic meetings, discussion forum for knowledge exchange, a campaign for propagating group's knowledge and activities, making connections, and seeking popular front for group's activity operation. The coordinative roles of the group included government units propagating technologies and methods for working supplements, local government pushing the activities of the network group into the local development plan for allocating budget, independent organizations supporting knowledge and budgets, educational institutions establishing activities and send juveniles to participate the group, and private companies supporting budgets.

Keywords: The Patterns and roles of people's network, Water resources conservation

Area Based Development Research Journal.2012;4(3) Article No. 255505
http://abcjournal.trf.or.th/

Needs of OTOP Producers to Create the Community Development-based Network in Rachaburi Province

Akom Chareansuk

Faculty of Humanities and Social Science, Muban Chombueng Rajabhat Univarsity, Chombueng District, Rachaburi Province, Thailand 70150

**Corresponding author's E-mail: akom_ch@hotmail.com*

Abstract

There are 48 OTOP community and professional groups, classified as 2 and 3 star producers, currently operating in Rachaburi. Group members were formed in accordance with their product interest and their occupation. Even though the majority of labors were local people their skilled-labors for handicrafts were short supply.

The purposes of this research were to investigate business condition of the OTOP producers in Rachaburi, to seek their needs and requirements for product development and to find an appropriate from of OTOP development-based network.

Mixed methods were applied and the procedures used included both quantitative and qualitative techniques. Population included 1-3 star OTOP producers, committee and members of the community producers. Data were collected by interview, survey, small group discussion and educational visits at target organizations. The content analysis was applied in qualitative method. Data collected by survey method with the application of frequency and percentage.

The results of the study showed that the business condition of OTOP producers could be divided into 3 levels as a small group, a district and a province levels. The findings from survey revealed that needs concerning with business planning, an expansion of marketing distribution and an improvement of production process were a set of their real needs among OTOP producers but also an appropriate support from network organizations.

Keywords: Needs of OTOP producers, Community development-based network

Area Based Development Research Journal.2012;4(3) Article No. 255506
http://abcjournal.trf.or.th/

Community's Health Management System to Achieve a Model Tumbon for Learning: The Study of Chakthai Tumbon, Kaokidchakut District, Chanthaburi Province

Pinnarate Gadudom

Phrapokklao Nursing College, Chanthaburi, Muang District, Chanthaburi Province, Thailand 22000

**Corresponding author's E-mail: pinnarate@gmail.com*

Abstract

This qualitative study aimed to analyze and synthesize the body of knowledge as to community's health management system to achieve a model Tumbon of learning, focusing on four aspects: working concept, system management, outcome, and keys to success. Research methodology used was Rapid Ethnography Community Assessment Process (RECAP). A documentary review approach was applied to collect secondary data from Tumbon's information records and annual report. Furthermore, three data collection techniques were employed to collect primary data consisting of 1) in-depth interview, 2) focus group interview, and 3) participatory and non-participatory observation. The study site was Chakthai Tumbon Kaokidchakut Distric, Chanthaburi province. Ninety key informants included local administrators, community leaders, community authorities, civic sector representatives, governmental agencies, local wisdom people, and other stakeholders who involved in healthy-Tumbon mobilization. Data were analyzed utilizing a content analysis approach.

The findings showed that

1. Chakthai Tumbon municipality had high social capita in terms of community capacity where community members have involved to resolve community problems for approximate 20 years. This brought about seven systems that influenced community's health management by community itself consisting of: 1) management system, 2) management system of natural resources, environment, 3) compensative energy system, 4) community volunteers, 5) financial system, 6) community welfare system, and 7) community health system and local wisdom.

2. Leaders of Chakthai Tumbon municipality built community development based on a concept of participatory management with morality, virtue, accountability and equity. Also, they concerned social capita as an important mechanism to mobilize Tumbon's development and fostered community empowerment to enhance sense of community ownership.

3. Chakthai Tumbon municipality promoted core-team building where all stakeholder's could collaborate to achieve Tumbon's obligations, promote a learning process, and reduce conflicts of interest

4. Many awards provided by various organizations were evident that the local governor of Chakthai Tumbon was successful in terms of community management, energy management, community economy, and community volunteers. Keys to success was the local governor with a clear vision to promote participatory management, learning organization, and community development by community itself.

Keywords: -