The Journal of Behavioral Science
2009. Vol.4 No.1. 77-80

1906-4675

ICANDO: Development Process Model

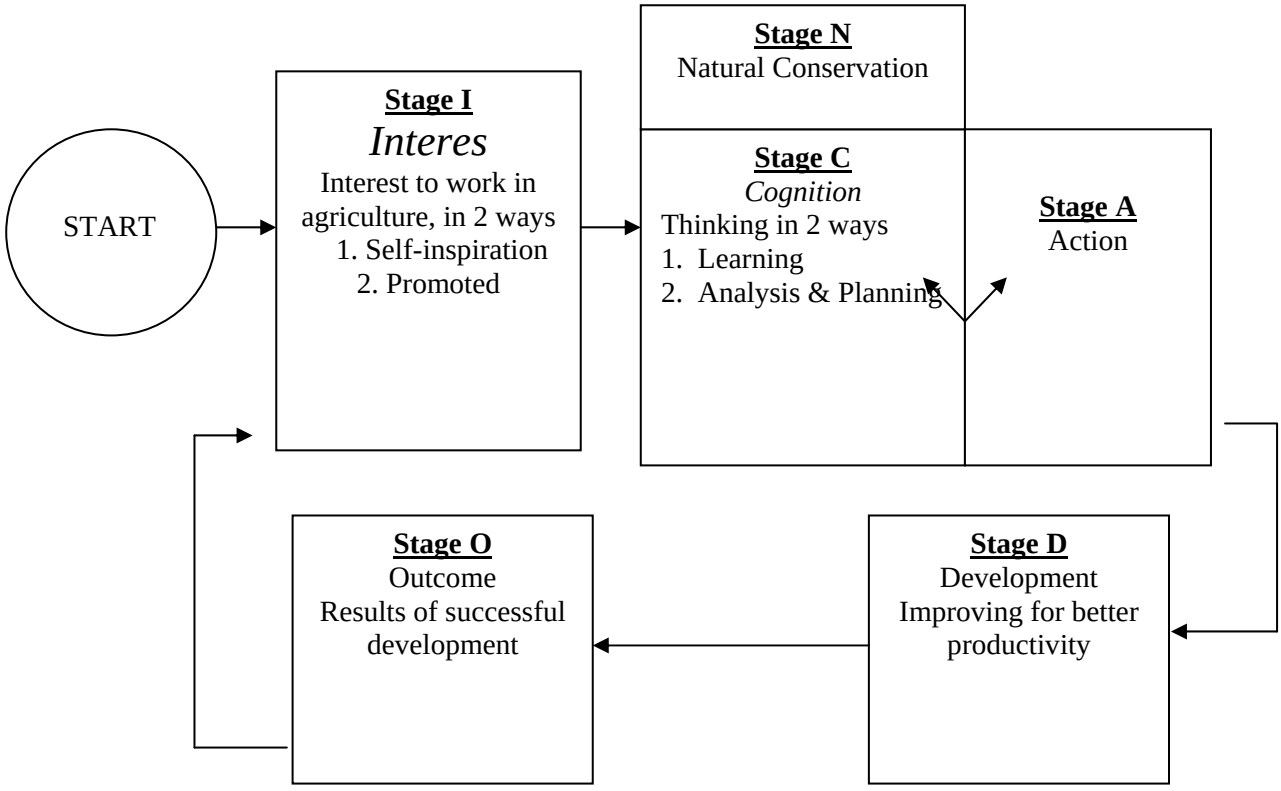
Prateep Jinnge [1]

The research paper "Socialization System for the Development of Traits and Skills of Agricultural Workforce: Nan Province Case Study" –for which the Behavioral Science Research Institute received sponsorship from The Thailand Research Fund (TRF)—with Assoc. Prof. Dusadee Yoelao and faculty of the institute as researchers since B.E. 2543, was divided into 2 phases. The first phase was a study of the basic data of Nan province about products, production process, marketing, and quality of agricultural workforce; including citizen organizations and development potentials of the community's agricultural workforce; as well as system, mechanism, and process of trait and skill development in agricultural workforce. The second phase was a field study, employing the body of knowledge obtained to develop agricultural traits and skills in farmers, in selected areas of Nan province. In this research, the author was involved in both phases of research procedure; and in phase 1 studied to address questions on system, mechanism, and process of trait and skill development in agricultural workforce with the researcher team comprising Assoc. Prof. Laddawan Kasemnet, Asst. Prof. Prateep Jinnge, Dr. Wiladlak Chuawanlee, Asst. Prof. Dr. Chantana Pakbongkoch, and Tassana Thongpakdee. The purpose of this study consists of 3 objectives. The first objective was a study of essential traits and skills of agricultural workforce regarding agricultural crops, livestock, fishery, and product-processing; with Dr. Wiladlak Chuawanlee and Asst. Prof. Dr. Chantana Pakbongkoch responsible for data study. The second objective was a study of system, mechanism, and process of trait and skill development in agricultural workforce; conducted by Assoc. Prof. Laddawan Kasemnet and Asst. Prof. Prateep Jinnge. The third objective was a proposition of appropriate system, mechanism, and process for trait and skill development in agricultural workforce; with all 5 researchers responsible for data presentation. And –as one of several questions in the second objective of the study, was "What processes do agencies or those concerned with farmers presently have for trait and skill development in agricultural workforce?" Such a question provokes ideas that would lead to the resolution of that problem. Many conceptual questions arose. For example: what development processes should we use to develop a person generally? Where and how should we study data? And how samples for study are to be grouped? The conclusion from shared ideas of those tasked to answer that question was that we should study people development processes from knowledge-provider group, i.e. agencies, projects and agriculture-related personnel, and from the other group of self-educates, i.e. successful farmers; to find out how the development processes of these 2 groups are similar or different, which steps in the process are crucial focuses. In the first group, a study was conducted from program documents of the Department of Agriculture, various levels of agriculture courses of the Ministry of Education, and royal-initiative agricultural projects, totaling numerous documents. Interviews were performed on those concerned with training and providing agricultural knowledge for farmers, e.g. agencies' experts, teachers-educators, agricultural business owners, agricultural media, personnel of independent agricultural-promotion agencies; totaling 54 persons. In the group of successful self-educates, a study was conducted from documents, articles presenting self-development processes of successful farmers, in total 900 analyzed items; and interviews with 33 successful farmers, and 115 farmers exhibiting their products in the OTOP fair at Nan province during August 11-12, 2544.

[1] Asst.Prof. of Behavioral Science Research Institute, Srinakharinwirot University, Bangkok, Thailand 10110

In searching for answer, researchers analyzed documents. The portrait of processes discovered was that development of farmers by the knowledge-provider group focused on methods of doing, by presenting models, processes, and operating procedures; for instance, the various study courses would show clearly the operating steps.

Only some did focus on effects of doing, such as royal-initiative projects, including interweaving environmental-awareness values. In the group of successful self-educated farmers, reflected that the starting point of self-development process begins with of inspiration and happiness of oneself as a drive to endeavor to learn knowledge, experience, and development guideline of what they do, including inventing their own personal methods to develop and improve their products, resulting in higher returns. This process would be the motivation for farmers to continually invent and take various actions, development process of which is as depicted thus:-



From the figure, the development process of ICANDO can be explained as followed:-

Stage 1 Interest: abbreviated as I. The first stage of the development process is the stage that requires a person to have incentive or inspiration to develop own works. This interest can arise both from within oneself, or created by others. In the case of self-originated interest, it is the person's desire to develop due to an imbalance of what-is and the expectation, e.g. deficiency to satisfy physical needs; or in the form of lacking in financial resources and aspiring to progress, to have more possessions, hence the drive to create interest in self-development. In circumstances that interest was created by others, this may be presenting to the person to show benefits from outcome of activity or work development, or effects favorable to person's expectations: then the person can take on interest to develop. In addition, this incentive to develop will be a good driving force for the person to withstand obstacles that he may experience in performing activities; instillingpurpose, determination, perseverance, and dedication of physical and mental efforts to develop that activity to the full capability.

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Stage 2 Cognition: abbreviated as C. This stage is the result of stage 1, because when a person is interested to develop any subject, one will endeavor to learn, think and analyze matters to create understandings and to see direction for action; endeavor to seek out consequences of actions to propel oneself onto the path of development; and also prompting the person to pursue knowledge in a variety of manners to find novel analytic approaches to stir up interest of others in his activities, leading to success of work. In addition, this is the stage that helps a person develop oneself at all times, for making adjustments and improving results continually. This stage is where a person must think, analyze and plan for own activities, manage things and decide to act, see connection of operating direction as to what to do, how to succeed.

Stage 3 Action: abbreviated as A. This is the stage that a person has to take action to build skills and expertise in operation, because effective learning and performance require Learning by Doing. Frequent action or practices also lead to proficiency of skills and dexterity and efficiency of doing. Performing action may begin with explanation or demonstration of action procedures to a person, followed by the actual actions.

Stage 4 Natural Conservation: abbreviated as N. In this stage, a person to undertake development must take into consideration the environment and natural surroundings to ensure that one's actions produce positive effects on the environment, including both the natural environment and the social environment. Works –agricultural works or any type of production, should consider the environment, natural conservation, optimum utilization of resource. Social environment considerations include effect on social values, fostering of virtuous conscience in the acting person, selflessness in planning and managing. This stage should occur concurrently with both the Cognition and Action stages.

Stage 5 Development: abbreviated as D. In this stage, a person must use skills of operational assessment to check whether actions taken result in positive effects. If goals are not achieved, the actions should be improved. And if goals have been partly fulfilled to a degree, the actions must still be developed further to improve, progressing onto higher goals. In this stage a person must utilize much of cognition to discern direction for development. Therefore, it can be seen that effective operation must focus continuously on cognition process, action, and development.

Stage 6 Outcome: abbreviated as O. This last stage reveals the results from cognition, action, and development processes with consideration toward product of work, management, and if the resulting benefits successfully meet goals or expectations. If the outcome is highly successful, that will be a reward or an incentive to create interest to develop work further on. But if the result of an action not successful, a person's cognitive thinking would try to develop to effect outcome improvement.

From the details of the various stages as explained, the reader can see that the mentioned process is one that is continuous and can be applied in practice. In phase 2 of the "Socialization System for the Development of Traits and Skills of Agricultural Workforce: Nan Province Case Study" research, the researchers applied this process in the forms of development of persons through direct and indirect experiences. For applications of people development by direct experience, Kasemnet, et al. (2545) constructed courses for teachers in the development of learning administration to encourage school students to expand opportunities, creating traits and skills of quality agricultural workforce by applying ICANDO process as the conceptual framework of Agriculture subject teaching activities in Primary 5 –level students at Ban Chaisarn and Ban Saithong schools, Nan province. In this mentioned teaching activities, the teaching faculty constructed program in accordance with ICANDO process to assure that students develop interest, use cognition, perform action, have natural conservation consideration, develop and improve, and discern outcomes through Learning-by-Doing approach. The outcome from that was students developed well behaviors which were Agricultural traits and skills, especially skills in cognitive process and actions in fulfillment of goals jointly established by community, schools and students at the start (Kasemnet, 2545). For applications by indirect experience, Jinnge & Chuawanlee (2545) employed ICANDO process in the development of local mass-medias by presenting the ICANDO process through a PR dialogues model, for village PR

persons to talk on-air over villages' newscast towers daily for approximately 10 minutes per day. The PR dialogues were constructed using the ICANDO conceptual framework: with contents of each segment, e.g. the Interest stage presented things that should cause farmers listening thru newscast towers to recognize benefits of agriculture, stimulating their interest; Cognitive stage was presented as to what to do if they want to think and formulate plans to follow up on that interest; Action stage presented procedures that listeners may follow; Ideas based on Natural Conservation consideration were presented thru PR dialogues; presented guidelines to develop and improve works; as well as outcomes of the various activities, to be incentives for farmers to follow the model as heard. That study was evaluated from questionnaires, satisfaction from whether information heard was useful – can be applied in practice, including data-gathering on extending results by those concerned, e.g. applying to use in other villages besides the sample villages, report on interest received from audience in the villages. (Jinnge, 2545).

Even though the ICANDO process has been effectively applied in practice, but the process must still be tested by additional, repeated research and applications, to confirm feasibility and effectiveness of the process more clearly. The preceding was only a starting point of findings that the author has been involved with. The author very much hopes that when this process are tested and extended research are performed in the future, Behavioral Science academia may have another guideline for individual's behavioral development process.

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