

SOCIAL SCIENCES

SS - 01

FARMER-LEVEL EVIDENCES OF THE IMPACTS OF CLIMATE CHANGE: OBSERVATIONS AND COPING MECHANISMS OF RICE GROWING FARMERS ALONG THE PADSAN RIVER BASIN IN ILOCOS NORTE

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The impacts of climate change on rice-based production and ex-ante and post-coping mechanisms of rice farmers were documented in this study. Farmers' perception of climate change and level of technical assistance or institutional support that are being provided by local agencies and organizations were highlighted. A structured interview was administered to 150 rice farmers, randomly selected from 27 barangays of seven municipalities in Ilocos Norte. Key informant interviews and focus group discussions were done to validate the data gathered. Description and analysis of data were carried out using frequency counts, percentages and means; coping strategies were qualitatively described. Changes in rainfall patterns, increase in temperature, more intense and frequent typhoons and floods, and water scarcity were the farmers' perceptions of climate change and variability. Almost 90% mentioned low yields and low quality of palay seeds as major impacts followed by occurrences of unusual pests/diseases and weeds. To cope with these, the traditional "panagarbeng" or collectively repairing and maintaining of the irrigation system as a "sanjera" was a major strategy, followed by borrowing of money, farm inputs, fertilizer and seeds from private companies and farm suppliers. Farmers' experiences and knowledge in coping with climate change must be considered in policy formulation as basis to improve rice-based production.

Keywords: impact, climate change, perception, coping, sanjera

SS - 02

A MENTORING PROGRAM FOR TEACHER INDUCTION: A FIELD TEST

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This research assessed the need and effectiveness of a mentoring program for teacher induction following the research and development method. A preliminary survey was undertaken through a combination of quantitative and qualitative techniques using the interview and document analysis. The respondents in the study were college instructors without preparation for teaching. Subsequently, the results were the basis for the design of a mentoring program. The results showed that the initial year of new teachers was a period of survival and recovery. They encountered problems or difficulties which they kept mostly to themselves. These were: lack of knowledge about teaching method; preparation of lesson plan and syllabi; lack of self-confidence and stage fright; inability to communicate well; poor classroom management; lack of instructional materials/references/laboratory facilities; and inability to associate well with the members of their respective departments. To be able to cope with these difficulties, a mentoring program was developed for teacher entrants with or without professional education preparation to ensure a smooth transition into the teaching profession. The mentoring program explains what mentoring is, who can be a mentor and how he should relate to the mentee, the guidelines necessary in undertaking the program and the specific activities that can be undertaken in each mentoring stage (sponsoring, coaching, and supervising) in three areas: the institution and its policies, instructional processes, and personality development. Significantly, high differences between the mean pretest (1.87 to 2.56 : fair to satisfactory) and mean post-test scores (4.16 to 4.40: very satisfactory) on the overall performance of the dyads were obtained at 0.01 probability level through the implementation of the work orientation of mentoring program.

Keywords: mentoring, teacher induction, mentor, mentee, coaching

SS - 03

FINDING A NICHE: TRAINING NEEDS ASSESSMENT FOR FILIPINO INVENTORS

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The Science and Technology Information Institute (STII) was commissioned by the Technology Application and Promotion Institute (TAPI) to conduct a study to: (1) gather information on the appropriate training needs of Filipino inventors to help them improve their inventions and their commercialization efforts; and (2) identify training needs per region and per sector. A focus group discussion (FGD) was conducted with 15 inventors representing inventor organizations nationwide accredited by TAPI. They were divided into two groups. Eight pre-programmed questions were used as guide in the discussion. The FGD revealed the following: huge gap between the ‘haves’ and ‘have-nots’ among their ranks; their needs were not being addressed by TAPI and other concerned government agencies; the DOST regional offices were hardly a factor in inventor assistance; inventors were aware that they were partly to blame for their current fractured state; and, presence of knowledge gaps in the technical, entrepreneurial, marketing, and personality aspects. However, results also showed that FGD alone was not enough to come up with a complete list of trainings as inventors were not fully aware of the skills and knowledge they need for personal and product/invention development. Further study is needed to enhance understanding of the inventors to determine the specific training needs. Other recommendations were: TAPI should develop specialized training modules in key areas such as quality control, product packaging, and craftsmanship on the technical side; and marketing strategy, business plan development, and entrepreneurship for commercialization; holding regular dialogues with the inventors’ organizations; close coordination with DOST regional offices; and intervention on eventual reconciliation of the various groups under one umbrella organization.

Keywords: FGD, Training Needs Assessment, inventors, TAPI

SS - 04

CONSUMERS' ATTITUDES AND KNOWLEDGE LEVEL ON ORGANIC PRODUCTS IN REGION I AND CAR

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This study focused on the assessment of consumers' attitudes and level of knowledge towards organic products in Region I and CAR, including factors that are associated to these. Results of interviews revealed that consumers are generally aware of organic products. They have moderate knowledge on the socio-economic and health attributes and have a favorable attitude towards it. Health benefit is the most significant motivation of consuming organic products. However, there are consumers who have doubts and reservations on the actual health and environmental benefits derived from it. Most consumers signified willingness to shift consumption from non-organic to organic products. However, consumption is still low in the regions because of the unavailability of such in the local market. If there are, these are sold along with non-organic products because there is no established organic market yet in most of the areas in both regions. Likewise, there is no assurance that such product is organic unless certified by existing certifying bodies. With these realities, government must strengthen its advocacy effort in encouraging farmers to adopt organic farming in order to meet consumers' organic product demand. Likewise, support services such as market and organic certification must also be given equal importance. More effort is also needed in information, education and communication campaign (ICE) on matters regarding organic products in order to give consumers the proper view regarding the long term and significant benefits of organic product consumption. Through this, consumers can develop a more positive attitude regarding organic products.

Keywords: IEC, organic products, attitudes, knowledge, consumers

SS - 05

**ENVIRONMENTAL KNOWLEDGE, AWARENESS,
AND PERCEPTIONS OF TERTIARY STUDENTS ON
CLIMATE CHANGE**

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Climate Change is now the concern of the country as it is attributed directly or indirectly to human activities. This study determined the environmental knowledge, awareness, and perceptions of college students on climate change. A Climate Change Questionnaire (CCQ) was administered to 50 students (40% male and 60% female). The majority of the students were concerned about the environment. They are most concerned with global warming and climate change, and they were least concerned with radioactive contamination and loss of habitat of wildlife. Results of the CCQ revealed that students are knowledgeable and aware (95%) of concepts and issues of climate change. Sources of their knowledge are newspapers, books, and television. A high percentage of students (75%) showed a positive attitude towards tree planting, public transport, walk and bike, and saving electricity to improve the quality of the environment and mitigate climate change. The results of this study will serve as baseline information on the integration of global environmental issues, such as climate change in tertiary level environmental education and climate sciences.

Keywords: environmental knowledge, climate change, global warming, environmental education, tertiary students

SS - 06

**KNOWLEDGE OF OL TRAP USERS ON MOSQUITO,
DENGUE, AND OL TRAP AS BASIS FOR COMICS
DEVELOPMENT TO PROMOTE OL TRAP USE**

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The study sought to determine the knowledge of community members about dengue and the Ovicidal-Larvicidal (OL) Trap that was used as a basis in developing a comic magazine as an information material for the nationwide promotion of the OL Trap, an innovation by the Industrial Technology Development Institute. The OL Trap is one of the government's multi-pronged actions to fight the spread of the deadly dengue virus. The study surveyed 265 people from five communities (Brgy Zone I and Brgy Zone II, Digos City, Davao Del Sur; Brgy Pico, La Trinidad, Benguet; Brgy Bata and Brgy Taculing, Bacolod City, Negros Occidental) using survey questionnaires, community meetings, and personal interviews. The said barangays were recipients of the OL Trap. The study found that most of the respondents did not have the correct idea about *Aedes aegypti* and dengue. Most of them knew how the dengue-carrying mosquito looked like but did not know that it was a daytime insect. Most were aware that only female mosquitoes bite and lay eggs only on clean water, but were unaware of the mosquito's preference for dark, moist places. The majority knew that dengue was fatal but preventable. On the OL Trap, most respondents knew how it worked and how it was used but they had to be taught on proper disposal of contents with mosquito eggs and larvae. Most also said that P15.00 for an OL Trap kit was reasonable and P6.00 per month for pellets was affordable. Many suggested that OL Trap kits be sold in drugstores and barangay halls. Most believed that the OL Trap was effective and that they would recommend its use. A minority could not yet give an opinion whether the OL Trap was effective or not. The survey results were used in developing 'Ang Komiks' that carried for its maiden issue the story 'Ang OL Trap sa Barangay Madengue' which was published in seven major Filipino languages: Tagalog, Bisaya, Iloco, Bikol, Pampango, Hiligaynon, and Waray-Waray.

Keywords: OL Trap, *Aedes aegypti*, dengue, comics, knowledge

SS - 07

POTENTIAL ROLES OF THE ACADEME AND RELIGIOUS INSTITUTIONS IN SUSTAINING THE GAINS OF THE PEACE PROCESS IN SOUTHERN PHILIPPINES

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The Government's roadmap to peace is not without obstacles as both biases and wrong notions on the on-going negotiations can be potential spoilers that can derail the entire peace process. This paper is an attempt to determine common misconceptions people have on the negotiations between the Philippine Government and the Moro Islamic Liberation Front (MILF). To do this, a total of 300 respondents were asked to complete a 53-item questionnaire regarding the peace process. The responses were analyzed using descriptive and multivariate statistical analyses. Results showed that the respondents lack knowledge on key aspects of the agreement, such as on the extent of the territory of the Bangsamoro and the rights of its inhabitants. Some misconceptions include the belief that non-Muslims will not be guaranteed their rights and that they will be driven away back to Visayas and Luzon. Moreover, Canonical Correspondence Analysis of the data point to the possibility that religion may have been helpful in shaping the hearts and minds of the people towards the agreement and the entire peace process. This lack of understanding and the proliferation of personal biases amongst people imply the need to organize massive information dissemination campaigns designed to clarify issues vis-à-vis the peace agreement via a multiplier effect. The results of this study also point to the potential roles that the academe and religious institutions may play in dispelling these wrong notions in order to help sustain the gains of the peace process in Southern Philippines.

Keywords: peace process, Bangsamoro, Academe, Religion, Framework Agreement on the Bangsamoro, Moro Islamic Liberation Front

SS – 08

**STRENGTHENING COMMUNITY RESILIENCE OF
BARANGAY PULA, KANLAON CITY, NEGROS ORIENTAL:
UNDERSTANDING RESIDENTS' PERCEPTIONS AS BASIS
FOR COMMUNICATING HAZARDS AND RISKS**

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An understanding of residents' perceptions about hazards and risks is important in designing a disaster risk reduction-related communication strategy. People's perceptions about hazards and risks, however, are influenced by knowledge about these specific hazards, disaster history of the area, and one's direct experience of an event or the lack of it. The case study of Brgy. Pula focused on: (a) identifying the general perceptions about volcanic risk of people living close to Kanlaon; (b) looking into previous experience, education, attitude and beliefs as factors that influenced perceptions; and (c) identifying communication strategy that best fit the need for the pilot community to take steps toward strengthening resilience. The goal is to promote awareness about hazards from Kanlaon that would lead to observable emergent positive actions towards preparedness, with the long-term goal of reducing risk. Field interviews with residents and local officials and small group discussions were conducted between 2010-2011. Findings show limited knowledge of historical eruptions due to narrow timeframe of actual experience. Based on this, a series of barangay-level activities were conducted with carefully selected methods that would be used for series of community-based activities. The activities aimed to: (1) identify information needs and develop materials that would persuade the target audience; and (2) facilitate discussions towards planning for volcano-related disasters. Observed positive actions of officials and residents noted after implementation of the communication plan include community-initiated information campaign for each *purok*, design and installation of early warning device (*batingting*) for each *purok*, communication-test of the emplaced system and a volcano evacuation drill in July 2012.

Keywords: perceptions, hazards, risks, preparedness, awareness

SS – 09

**THE HISTORICAL ANALYSIS ON THE CHANGES
OF THE TRADITIONAL BELIEFS SYSTEM OF SUBANEN
IN LABO BANWA, MISAMIS OCCIDENTAL**

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This paper is a study on the traditional beliefs system of the Subanen in Labo Banwa in the province of Misamis Occidental. Labo Banwa is interior area located at the periphery of the city of Ozamiz in the southern part of Mt. Malindang. As they sheltered themselves in some of the ranges of the mountain, it is interesting to know whether their beliefs are preserved through years in the face of the ever increasing development of the city. This paper attempts to understand the continuity and change of their beliefs. However, it is limited to the basic life cycle of Subanen such as birth, marriage, cultivation, and death. As a descriptive study, this employs key informant interviews, observation, and visitation in the area and analysis of archival materials as the primary sources of information. Findings showed that the Subanen claimed to have their traditional beliefs observed/preserved through years, however, it is also noted that among the younger generations, these traditional beliefs are not fully observed and they are slowly losing knowledge about them.

Keywords: Subanen, Labo Banwa, Traditional Beliefs System, Mt. Malindang, Misamis Occidental

SS – 10

PROFITABILITY ANALYSIS OF ORGANIC VEGETABLE PRODUCTION IN REGION I

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This study analyzed the profitability of organic vegetable production in Region I. It determined the costs incurred and the benefits derived by the farmers. The farmers were classified by farm type: full organic (FOFT), in conversion (ICFT) and conventional (CFT). There were 159 farmers interviewed in Ilocos Norte, Ilocos Sur, La Union, and Pangasinan. The “pinakbet” vegetables were included in this study. Data were analyzed descriptively with profitability, partial budget, and price analysis, including yield sensitivity analysis. Generally, material and labor costs were higher in FOFT and ICFT than in CFT. However, net incomes were higher in the two organic farm types. Farmgate prices of FOFT were also higher except for finger pepper and okra which were higher in CFT and ICFT, respectively. Ampalaya, finger pepper and okra yielded highest in FOFT; eggplant, pole sitao and squash in ICFT. The partial budget analysis showed that except for finger pepper, higher net benefits were obtained from vegetables grown under FOFT than CFT. The added benefits more than compensated the added costs. Hence, production of organic “pinakbet” vegetables is highly remunerative. More intensive information dissemination and aggressive advocacy campaign are necessary to promote organic farming.

Keywords: organic farming, organic vegetables, sustainable crop production, profitability, soil and environmental conservation

SS – 11

WOMEN'S ACTIVITIES IN THE GATHERING AND MARKETING OF SEAWEEDS IN ILOCOS NORTE

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Women's activities have been treated as separate activities and the complimentary and conflicting roles and relations between women and men have been given little attention. Studies show that coastal communities have a vital role to play in the development process of many coastal communities. This study was conducted on the seaweed gathering and marketing industry in four coastal towns of Ilocos Norte from January 2011 to February 2012 using descriptive analysis of data from gatherers and sellers. The results show that there are variations that highlight men's and women's access to, and control over, the seaweed resources. There are specific roles, as well as common roles of women with men that were identified to improve the economic condition of the coastal people. It is recommended that men and women in seaweed gathering and marketing be trained with appropriate drying methods and packaging skills in order to enable alternative livelihood projects.

Keywords: women's activities, seaweed gathering and marketing, socio-economic characteristics, coastal resources

SS – 12

HOUSEHOLD PARTICIPATION OF CEBU RIVERS CLEAN UP

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Household wastes pollute the San Roque creek in Cebu City. This study investigated the role of households in cleaning up the riverbanks of the towns of Argao and Carmen, Cebu province, and barangays Usmadcatang, Cantumog and San Roque in Cebu City. Fifty six respondents provided their awareness on attitudes towards environment and water utilization. Married women of Argao and Carmen are the ones who are mainly responsible for the housekeeping with part-time sources of income. The main environmental issues that the respondents were concerned about were: climate change, water pollution, loss of biodiversity, water pollution, growing waste and depletion of natural resources. The responses of respondents regarding the environment were: correct disposal of hazardous household products at home, proper maintenance of septic systems, contacting public officials, and attending public hearings to encourage the community to support laws and programs to protect water resources. CTU researchers coordinated with the LGU of San Roque in river clean-up and raised household awareness towards the environment.

Keywords: household, clean-up, river, environment, participation

SS – 13

**SOLI-SOLI (*Typha latifolia*) AS AN INDUSTRY AND AS A
FESTIVAL EMBLEM OF PACIJAN ISLAND, CEBU,
CENTRAL PHILIPPINES: ITS STATUS, PROCESSING AND
PROPOSED CONSERVATION OPTIONS FOR
SUSTAINABILITY**

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Soli-soli (*Typha latifolia*) a plant found abundantly in Lake Danao, San Francisco, Cebu, was studied as an industrial resource, its processing and a festival emblem of the fiesta celebration of Pacijan Island. This is a descriptive study where a questionnaire was used as a tool for gathering the data given to the weavers of solisoli, festival organizers, LGU officials, selected inhabitants and tourists of Pacijan Island. Results showed that soli-soli plant was converted into bags, belts, caps, and mats where tourists usually buy them because of their unique material. The soli-soli was processed by harvesting the young soli-soli plant. Then this is dried under the sun for 2 to 3 days. They are then cleaned, made into strips, tanned with different colors and woven to the desired articles. Gender composition on the soli-soli industry is dominated by the females (60%) and males (40%). Marketing of the soli-soli products is done locally and some were brought to nearby provinces like Cebu City and Ormoc City. Mats topped among the saleable articles followed by bags, hats, fans, slippers and ropes. Results showed that soli-soli festival is done every third Sunday of March in San Francisco where it depicts the soli-soli plant which abounds around Lake Danao and a freestyle street dancing competition using the soli-soli plant as the dominant material for the costumes of the participants. Extraction of soli-soli is most active from January to June due to the preparation of articles for the fiesta and summer tourism in Camotes Islands. Problems of soli-soli industry are: limited marketing, financing, and product development.

Keywords: Soli-soli, *Typha latifolia*, festival emblem, Pacijan, industry

