

activities helped establish a strong social relationship among members of the communities. Through this relationship, a kind of informal networks evolved where information flow in the community was at relatively faster rate. They have indigenous communication channels like "aggad" and "upug" which are used in encouraging their young to preserve, maintain and use the IK they have inherited from their forefathers. Through verbal interactions coupled with practical applications, coaching and imitation, the traditional knowledge and practices of the Bugkalots have evolved through time until now.

The indigenous agroforest practices of the Bugkalots contributed to the sustainability of their farming systems and declare the importance of IKS in achieving sustainable development. Moreover, communication through indigenous social exchange is an effective mechanism to empower, unite and involve local communities in the process of conserving and preserving the environment, IK and cultural heritage.

Keywords: indigenous knowledge systems, agroforest farming systems, communication systems

SSD No. 5 SIGNIFICANCE OF SWEETPOTATO ENTERPRISE IN THE LIVELIHOOD SYSTEM IN CENTRAL LUZON

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Sweetpotato enterprise is an economic activity which does not only include growing and producing sweetpotato. It involves a number of activities and players such as stakeholders, producers and users. This study reveals the reasons of households in engaging in sweetpotato enterprise, the extent by which the enterprise contributed to their economic condition and the problems encountered by them.

The respondents in the study were 114 households from Bagac, Bataan, Moncada and Paniqui in Tarlac, and Bayambang, Pangasinan. Likewise, the operation of the starch factory in Sta. Maria, Pangasinan was also studied.

Income from sweetpotato production is not only realized from roots but also from seedpieces which are used as planting materials. Income from production of seedpieces averaged P 9,920/ha while persons involved in trading earned P400 to 16,000/ha. The

wide range of income is attributed to the elaborate marketing channel consisting of tipsters, agents, haulers, traders, wholesalers and retailers. A similar channel exists in the marketing of roots.

Sweetpotato root production is intended for commercial purposes rather than domestic use. Varieties used by growers are dictated by the requirement of traders. Traders most of the time control the prices of sweetpotato especially during peak harvest months while agents/small traders control the price during lean harvest time. Traders derive income from marketing of sweetpotato ranging from P4000 to P23,000/ha.

The mean contribution of sweetpotato to family income was 26%, the highest among the income sources. Aside from the cash contribution to family income, sweetpotato saves cost on food and feed by about 10 to 30% and 30 to 70%, respectively.

Sweetpotato enterprise is presently threatened by: (a) increasing insect pests and disease problems, (b) limited supply of clean planting materials, (c) uncertainty of the operation of the starch factory and (d) fluctuating demand for fresh roots in the fresh market.

Institutional and support services have to be strengthened and provided adequately to counteract these threats.

Keywords: sweetpotato, starch, seedpieces, marketing

SSD No. 6 HOMEGARDEN AS A HOUSEHOLD COPING STRATEGY: A VIEW FROM THE POLICY ENVIRONMENT

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Adaptation, coping, and strategy are concepts with a common denominator. These are dictated by change, which can bring about adjustments. However, these concepts vary due to the element of time. As argued by Davies (1993), coping and adaptation are distinct from that of strategy in the sense that the former are short term-oriented (safety-net mechanisms) while the latter is a response developed over time (which becomes permanent as it integrates in the culture or tradition). Coping is synonymous with what is referred to as 'adaptive strategy' (Gladwin and Butler 1984:208) where people develop patterns or processes to cope with or adapt to changing environment.

Households depend on traditional forms of activities, which are proven viable and stable. The diverse production strategy in the homegardens, utilizing different micro

niches ensures much of the households' daily food requirement. Homegardens might not be as lucrative as commercial farming but their significance in satisfying material (food and income) and non-material (satisfaction among managers of these domains) needs is an important point to reckon with.

In pushing for the continuity and improvement of this food production system, external support like policy environment is critical. Households' entitlement to their land becomes difficult because of conflicting views on pronouncements. This relates to the issue of institutional mandate. Complicating the issue is the strong demand of household communities of their indigenous rights like ancestral land and domain claims.

The *emics* and *etics* of land tenure attempts to provide a reconciling point for understanding the analysis of the policy on land tenure in Baguio City. From the *emic* view, one understands culturally defined norms on land ownership as well as the role of this resource among the natives. A grasp of the outsider's notion, on the one hand, like definitions of land ownership by government agencies such as the Department of Environment and Natural Resources, Department of Agrarian Reform, and the National Commission of Indigenous Peoples Rights is significant for evaluating the objectives of their policies. By looking at these two variables, the relationship as well as the extent of the policy sub-system's consideration of people's view is determined. This in turn becomes relevant in identifying areas for the promotion of a sustainable development of homegardening.

Keywords: households, homegardens, coping strategy, policy, and land tenure

SSD No. 7 TRADITIONAL WEATHER FORECASTING METHODS IN ILOCOS NORTE

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Weather forecasting is vital in optimizing agricultural production, increasing profitability, and in decreasing risk. Weatherwise folks in Ilocos Norte still rely on weather lore in predicting the weather and to them, these tend to be indispensable.

Weatherwise folks, aged 60 and above, from selected barangays of 17 towns of Ilocos Norte were interviewed using a structured interview schedule. All the respondents rely on the signs of nature in predicting the weather. They claim that when ants come in and out of their caves carrying some food, or numerous earthworms are coming out from soil and swarm of dragonflies fly low, there is a downpour of rain. The unusual chirping and migration of birds such as Himalayan swiftlet, lesser caucal, plaintive cuckoo, or

heron; the unusual behavior of dogs, frogs, and honeybees usually predict an upcoming rain, typhoon or bad weather. When physic nut, bangkal and siniguelas fruits ripen early or shed the onset of rainy season is near. Meanwhile, a long parallel band of feathery clouds and moon with ring would indicate an upcoming rain and if seawater evaporation is visible and high seawaves are observed, bad weather is coming.

Respondents said that these weather lore were formulated out of necessity and repeated observations made them realize that these are reliable. This is the reason why they still rely on these indicators more than the weather information from Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) as these are not location-specific. Moreover, the rural folks had no formal schooling this cannot appreciate technical terms.

Literatures concur that these lore have scientific explanations. As such, they could be important bases for farmers in planning agricultural operations and for fishermen on their fishing activities and thus, an important supplement to the services of PAGASA.

Keywords: weather lore, weatherwise folks, forecasting, traditional

