ABSTRACT

1990-1993 was a period of extreme economic hardship among the smallholders in Sarawak. The market prices of several cash crops namely pepper and cocoa had slumped. The immediate consequence of this commodity price slump was a drastic decline in household income and diminishing purchasing power. High cost of production inputs particularly fertilizers and pesticides exasperated the unfavorable conditions further. Consequently, many households had difficulties in maintaining an adequate flow of cash and food throughout the year.

This study focuses on how the independent smallholders and centrally managed smallholders cope with a commodity price instability. There are two reasons why these two types of smallholders were included in this study. First, they give the overall representation of the two main types of smallholders found in Sarawak. Another consideration for doing this is to ascertain whether an intervention such as *in-situ* land scheme has any effect on the dependent variables investigated in this study.

To minimize environmental and cultural variations, the samples for study were selected from areas of similar type of environmental conditions and belonging to people of similar origin. The study was confined to the Iban smallholders from the Sri Aman Division of Sarawak, where the majority of the centrally managed smallholders and the independent pepper smallholders are concentrated in the state.

Three samples of Iban smallholders were studied. The first sample was selected from the Begunan pepper smallholders. This particular group represents the independent smallholders who experienced a prolonged pepper price slump at the time of survey. The second sample was selected from the Paku-Layar cocoa scheme smallholders (henceforth called Paku-Layar CS sample). This group represents the centrally managed smallholders affected by a prolonged cocoa price slump. The third sample was chosen from the Pakit-Undop oil palm scheme smallholders (henceforth referred to as Pakit-Undop OPS sample). This group represents the centrally managed smallholders who were unaffected by a commodity price slump. Hence, Pakit-Undop OPS sample serves as a 'control group' in this study. Apart from providing the main function of a 'comparison group' in a

research design, the other rationale for an inclusion of a control group is that it helps to uncover some intervening or extraneous variables that are affecting the dependent variables other than the main independent variables of the study.

The specific objectives of this study are to:

- Identify and compare household coping strategies used by the independent and centrally managed smallholders during a commodity price slump and/or boom.
- Determine why different coping strategies occur within a particular group of smallholders or between groups apparently facing similar problems of price slump.
- Assess and compare the intensity, effectiveness, and sustainability of the household coping strategies.
- Recommend appropriate interventions and policies for the restoration, improvement and protection of household coping strategies.

The present study reveals that the Iban smallholders operate various paths of adjustments available to their households to cope with a price slump. The combination of paths used include the following (a) income remedial strategies (IRS), (b) subsistence-based strategies, (c) reciprocally based strategies, and (d) production and consumption modifying strategies.

Findings on IRS reveal that the options available were limited to non and off-farm employment (NOFE), fall-back cash cropping and exploitation of common property resources (CPRs). A large majority of the households affected by the price slumps relied heavily upon NOFE. Earnings from NOFE are vital contributions to the total household income in order to maintain even modest standards of living. High NOFE income is typically associated with high educational attainment and associated skills. However, the survey revealed that the majority of NOFE workers was able to secure only unskilled or low-skilled jobs from NOFE. This is because they do not have the vocational skills that are relevant to their occupation in the NOFE. In that sense, even the availability of NOFE, while making a vital contribution towards supplementing household income, has not provided a sufficiently high income to those involved in the NOFE.

The most important fall-back cash crop in the three samples studied is rubber. The Begunan PS sample was highly dependent on rubber tapping as an income remedial strategy during the pepper price slump. The dependency on this IRS in the Paku-Layar CS sample was only moderate although a great majority of the households owned rubber gardens. However, a majority of the rubber gardens are old and this greatly reduced the earnings from rubber.

The potential of CPRs in supplementing household income during commodity price and income crises was illustrated by the *jinggau* trade and inland commercial fishing. It was during this stressful period that harvesting of *jinggau* become abusive and the exploitation of inland freshwater fish resources was intensified. The effect of this abusive exploitation was obvious, the rate of harvesting of *jinggau* trees was pushed beyond the rate of growth and subsequently the tree stands continued to decline. The effect of over exploitation of inland freshwater fish resources was the depletion of fish resources.

None of the households affected by the price slump and/or other adversities sell or dispose of their household assets even though some may be desperate or living 'from hand-to-mouth.' This clearly suggests that the price slump and income crises did not impel members of households to dispose their land and other valuable traditional assets as often dreaded by many.

The economic hardship in times of a commodity price slump necessitates many households to deploy miscellaneous subsistence-based strategies that encompass staple food production, gathering activities, hunting, fishing, backyard livestock production and home gardening. During the price slump, these subsistence-based strategies not only provide the means for the affected households to secure or produce food or other basic necessities for consumption but they also help to safeguard or conserve their already low household incomes. Without resorting to these subsistence strategies, money that would otherwise be spent on investments has to be diverted to meet pressing food needs.

The volatility of cash crop prices, and the needs for money income necessitate the deployment of diverse reciprocally based strategies that encompass income-sharing through remittance transfer, sharing of production resources, reciprocal labor exchange,

and patron-client exchange (an important source of production and consumption credits). These exchanges provide households the means of spreading risk or economic hardship during the price slump period. However, the access to production credits during the price slump was insufficient or diminished tremendously. Findings of this study also reveal that the price slump had a negative impact on employment of both the hired labor and family labor resources in the pepper industry. The incidences of unemployment and underemployment of both the hired and family labor resources increased substantially. This is because farms were neglected, getting smaller and abandoned completely. Unable to pay for the hired labor, many households initiated local self-help effort. By utilizing unpaid family labor and through self-help these family farms are able to avoid or reduce the need of excessive use of hired labor. In this way they can reduce or cut down the cost of maintaining their family farms during the economic hardship period. On the other hand, the local self-help through reciprocal labor exchange did not increase substantially as anticipated. This is because many pepper farms were neglected, getting smaller and abandoned completely and therefore there was little need to deploy a large work unit that is supplied by a reciprocal labor exchange. Reciprocal exchanges such as the sharing of production resource (or joint use of a fall-back cash crop particularly rubber), and incomesharing through remittance transfer were confined only to a small circle of closely related individual or immediate family members. This means that at the advanced phase of the price crisis the sharing of resources was restricted to immediate family members.

Both pepper smallholders and the SALCRA management had to adopt a variety of austerity measures during the commodity price slump. There were two key elements of this austerity measure namely production and consumption modifying strategies. The most popular modify strategies were either to abandon the farm or reduce farm maintenance. The latter response involves two paths of action. The first one is to reduce the application frequency of important farm production inputs such as inorganic fertilizers, herbicides, insecticides and fungicides. The second one involves a shift or change in brand of inputs used.

Consumption modifying strategy basically involves rationing or more precisely it emphasizes on a cut down in spending not only on food but also on non-food items. The cut down on spending on all food and non-food items was more prevalent among households affected by a prolonged commodity price slump than those unaffected. In the case of smallholders who were badly affected by a commodity price slump, the spending cut on food items was bigger among the independent pepper smallholders than the managed smallholders. This implies that the independent smallholders spent less of their income on buying food items. Therefore, they had to depend on the free fish, wild meat and vegetables that they obtained from activities such as subsistence fishing, hunting and gathering to protect their consumption. In this way they are able to prevent themselves from being malnourished or starved that is normally associated with a food or consumption rationing.

Generally, many Iban households have demonstrated their ability to use an array of these coping strategies. However, the assessments on the effectiveness or sustainability of these coping strategies have cast or shade some doubts and concerns as to the capability of some of these strategies both in achieving sufficient flow of cash and food around the year, and sustaining their long term livelihood security. As such, some effective and complementary public interventions and policies are necessary to restore, protect, improve and develop the household coping strategies that had greatly weakened or diminished.