Risk and poverty in agriculture: Expanding roles for agricultural cooperatives in Malaysia

Okezie Chukwukere A[1], Amir Hussin Baharuddin[1]

School of Social Sciences,Universiti Sains Malaysia, Pulau Pinang, MALAYSIA

Correspondence: Okezie Chukwukere A (email: okezie@usm.my)

Abstract

The inter-relationship between risk, poverty and agriculture in development economics has gained increased attention. Agriculture in which the poor predominantly operate is a fragile and risk-prone sector. The risks range from the large (aggregate) ones to the small (idisyncratic).Aggregate risks such as droughts,cyclones,floods, and market fluctuations tend to affect the whole community simultaneously, while idisyncratic risks affect a particular household or individual such as with respect to illness, death, and disability. The contribution of Agricultural cooperatives as instruments of development has been widely acknowledged. This study highlights the role of agricultural cooperatives in tackling both risks and poverty in the Malaysian agriculture sector. It was found that with 5.685 million members, share capital amounting to RM 6.849 billion and total assets worth RM 34.868 billion the Malaysian agricultural cooperatives were well placed to manage poverty related risks afflicting local paddy farmers, fishermen and smallholders through their diverse functions in credit/finance, plantation, housing, consumer, transport and services. Nevertheless, in conclusion, to better harness their strength these cooperatives must be less dependent on government funding to gain better freedom from undue interferences.

Keywords: agriculture, cooperatives, Malaysia, poverty, risk, roles

Introduction

Agriculture remains the most likely source of significant economic growth in many developing countries. Historical experience suggests that agricultural growth and increases in agricultural productivity may be a prerequisite to broad-based sustained economic growth and development. This was certainly the case in virtually all the world's developed countries. More contemporary experience demonstrates that, with few exceptions, overall economic growth has been most rapid in countries that have experienced significant agricultural growth. Rapid agricultural growth, supported by the public infrastructure investments made to promote it, has provided a powerful motor for growth in rural non-farm economies (Irz *et al*., 2001; De Janvry & Sadoulet, 2002). Where agriculture and public rural investment have been stagnant – as in resource poor areas of Asia and sub-Saharan Africa – this has been much more limited.

Agriculture in which the poor predominantly operate is a fragile and risk-prone sector. A plethora of risks and uncertainties surrounds the livelihood of rural poor (Robinson & Barry, 1987; Fleisher, 1990; Andersen & Dillion, 1992; Anderson, 2001). Moreover mechanization, agric-inputs and now genetically modified organisms (GMOs) expose them to new risks and fears. Without knowing the nature and traditional coping strategies, it is difficult for NGO's and international development agencies to evolve risk management tools and make successful interventions(Andersen, 2001). It is essential to understand, how poor people themselves see risk and vulnerability and think of the ways to reduce them. To them, risk is not limited to income or consumption loss as it is conventionally perceived to be. It can be of personal liberty, self esteem, mobility, social interaction and so on.

Thus risk is one of the generic features of poverty. It is not possible to understand poverty without understanding causes and consequences of the risk. Studying risk provides us insights about poverty and the vulnerability. Risk mitigation, risk management and risk reduction is inevitable to reduce poverty. Despite having elaborate mechanism, poor households are not capable to eliminate vulnerability unless rendering them extensive support. Governments and developments agencies need to develop socio-economic safety-nets and instruments to eliminate risks from the lives of the poor (World Bank, 2000).The inter relationship between risk, poverty and agriculture in Development Economics has become issues of concern and for an emerging economy like that of Malaysia and under standing of these issues have become imperative.

Malaysia's commendable success in reducing its poverty incidence from 49.3% in 1970 to 5.5% in 2000 is attributed to various factors including rapid economic growth with macroeconomic stability and the inclusion of poverty reduction as an integral element of its development strategy. However despite policy commitment to poverty eradication evidenced in terms of strategies, programmes and projects as well as budgetary allocations, poverty continues to be a major development concern in Malaysia (Othman & Kari,2008; Nair, 2010).

The government expect Co-operatives to be the third engine of growth besides public and private sector. Commitment and confidence placed by the government are reflected by the financial and none financial support indicated in various development plan. Prior to the Fourth Malaysia Plan there was no clear policy on Co-operative. The National Co-operative Policy (NCP), 2002-2010, was launched in 2002 to provide for the orderly re-development of co-operatives. This is the first national policy on co-operative development since independence. The short-term objective of the policy is to enhance the understanding of co-operative ideology amongst the people, so that the Co-operative can function as organizations that are capable of contributing towards economic growth and social development. Its long-term objective is to transform the co-operative movement into a vehicle that is competitive and geared towards eradication of poverty, creation of employment and business opportunities and upgrading of quality of life, based on the co-operative principles, for the national development in line with Vision 2020.

Co-operatives began by enabling people to raise themselves out of poverty and reduce the risks of vulnerability by providing pooling mechanisms for their resources and building up collective approaches to social protection (UN, 2003; Hagen,2004; ILO,2004). As the movement developed it became a means by which low and middle-income people continued to accumulate economic advantages (Birchall, 2004). Co-operatives raised whole classes of people out of poverty and prevented them from slipping back into it.

Objectives of the study

The study examined risk and poverty in agriculture in Malaysia and what roles for Agricultural Cooperatives in its Vision 2020. The specific objectives are to examine the typology of risk and poverty in the agricultural sector, identify and highlight the incidence of poverty of in the economic sectors, examine the roles of agricultural cooperatives in economic development; and ascertain the constraints and problems of cooperatives in developing economies.

Methodology

Study scope and approach

Malaysia, a multiracial country, managed to drastically reduce the incidence of poverty and lessen income inequality while achieving rapid economic growth and maintaining racial harmony. What transpired in Malaysia during the 1970-2000 period was complex and challenging, requiring masterful management by the government of the varied demands of a heterogeneous population. Malaysia formulated a range of policies and plans to guide the management of national development during 1970-2000. They consisted of: core national policies; long-term, mediumterm, annual, and special development plans; and sectoral and industry-specific master plans. The core policies were the most important; their main components formed the benchmark for all other policies and plans. They consisted of the New Economic Policy (NEP), 1970-1990, and the National Development Policy (NDP), 1991-2000. Complementing these policies was Vision 2020, which was formulated in 1991 and projected a vision of Malaysia three decades hence. The two core national policies were based on a philosophy of growth with equitable distribution. The policies saw national unity as the goal of development and the two-pronged strategy to achieve it (1) the eradication of poverty and (2) the restructuring of society. This was to be conducted within the context of rapid and continuous economic growth.

The analytical methodolgy is mainly descriptive drawing from the review of Government Policy documents,previous research works,case studies of cooperative deveolopment in other countries and International Cooperative Alliance(ICA).The data used are published data from the Department of Cooperative Development (DCD),Malaysia.

Discussion

Risk in agriculture

Agricultural risk is associated with negative outcomes that stem from imperfectly predictable biological, climatic, and price variables. These variables include natural adversities (for example, pests and diseases) and climatic factors not within the control of the farmers. They also include adverse changes in both input and output prices (Jain and Parshad,2007;Agwe and Azeb,2009;AIT/UNEP,2010). To set the stage for the discussion on how to deal with risk in agriculture, it's essential that the different sources of risk that affect agriculture are classified.

Types of risk

(i) Production risk:Agriculture is often characterized by high variability of production outcomes or, production risk. Unlike most other entrepreneurs, farmers are not able to predict with certainty the amount of output that the production process will yield due to external factors such as weather, pests, and diseases. Farmers can also be hindered by adverse events during harvesting or threshing that may result in production losses.

(ii) Price or market risk:Input and output price volatility is important source of market risk in agriculture. Prices of agricultural commodities are extremely volatile. Output price variability originates from both endogenous and exogenous market shocks. Segmented agricultural markets will be influenced mainly by local supply and demand conditions, while more globally integrated markets will be significantly affected by international production dynamics. In local markets, price risk is sometimes mitigated by the "natural hedge" effect in which an increase (decrease) in annual production tends to decrease (increase) output price (though not necessarily farmers' revenues). In integrated markets, a reduction in prices is generally not correlated with local supply conditions and therefore price shocks may affect producers in a more significant way. Another kind of market risk arises in the process of delivering production to the marketplace. The inability to deliver perishable products to the right market at the right time can impair the efforts of producers. The lack of infrastructure and well-developed markets make this a significant source of risk.

(iii) Financial & credit risk: The ways businesses finance their activities is a major concern for many economic enterprises. In this respect, agriculture also has its own peculiarities. Many agricultural production cycles stretch over long periods of time, and farmers must anticipate expenses that they will only be able to recuperate once the product is marketed. This leads to potential cash flow problems exacerbated by lack of access to insurance services, credit and the high cost of borrowing. These problems can be classified as financial risk.

(iv) Institutional risk: Another important source of uncertainty for farmers is institutional risk, generated by unexpected changes in regulations that influence farmers' activities. Changes in regulations, financial services, level of price or income support payments and subsidies can significantly alter the profitability of farming activities. This is particularly true for import/export regimes and for dedicated support schemes, but it is also important in the case of sanitary and phyto-sanitary regulations that can restrict the activity of producers and impose costs on producers.

(v) Technology risk: Like most other entrepreneurs, farmers are responsible for all the consequences of their activities. Adoption of new technologies in modernizing agriculture such as in introduction of genetically modified crops causes an increase in producer liability risk.

(vi) Personal risk: Finally, agricultural households, as any other economic entrepreneur, are exposed to personal risks affecting the life and the wellbeing of people who work on the farm, as also asset risks from floods, cyclones and droughts and possible damage or theft of production equipment and any other farming assets.

Poverty in Malaysia: An overview

Malaysia's commendable success in reducing its poverty incidence from 49.3% in 1970 to 5.5% in 2000 is attributed to various factors including rapid economic growth with macroeconomic stability and the inclusion of poverty reduction as an integral element of its development strategy. However despite policy commitment to poverty eradication evidenced in terms of strategies, programmes and projects as well as budgetary allocations, poverty continues to be a major development concern in Malaysia. Poverty in Malaysia persists, retaining much of its original characteristics; poverty tends to be concentrated amongst the Bumiputrai in the rural sector, the Orang Asli or indigenous minorities and in the poorer East coast states of the Peninsular and in East Malaysia (Nair,2010). The poverty problem in Malaysia has over time become more complex with the increasing importance of urban poverty, the emergence of new forms of poverty and increasing inter and intra ethnic and inter-sectoral income inequalities.

Incidence and pofile of poverty

The development strategy pursued by the Malaysian government which emphasised redistribution through growth had important implications for poverty in the country. Over the period 1971-1990 the Malaysian economy grew at the rate of 6.7% per annum while during the 1990-1995 period annual growth rates averaged 8.7%. The economy recorded an average growth of 4.7% per annum during the Seventh Malaysia Plan period and the real GDP expanded at an average rate of 8.7% per annum during the 1996-1997 period before registering a negative growth rate of 7.4% in 1998. The various measures undertaken to overcome the effects of the crisis succeeded in generating an average growth rate of 7.2% during the 1999- 2000 period. The phenomenal growth rates that were attained prior to the crisis had undoubtedly contributed to poverty eradication efforts with the overall incidence of povertydeclining from 52.45 in 1970 to 8.1% in 1999 (Table 1).

Table 1. Profile of poverty (%) by economic activities and major occupational groups, 1970-1987

Economic Activities	1970	1975	1978	1980	1984	1987
Rural	68.3	63.0	54.6	46.1	23.8	n/a
-Agricultural	64.7	59.0	48.0	41.3	43.4	40.0
-Rubber Smallholders	30.3	9.1	5.4	7.7	n/a	n/a
-Oil Palm Smallholders	88.1	77.0	74.0	55.1	57.7	50.2
-Paddy Farmers	40.0	47.0	38.0	35.1	19.7	15.0
-Estate Workers	73.2	63.0	55.1	45.3	27.7	24.5
-Fishermen	52.8	50.9	43.9	38.9	46.9	39.2
-Coconut Smallholders	91.8	78.8	73.0	64.1	34.2	n/a
-Other Agricultural	33.3	37.4	N'a	22.8	10.0	n/a
-Other Industries*						
Urban						
-Mining	33.3	37.7	28.3	33.0	3.4	n/a
-Manufacturing	23.5	17.4	23.8	13.4	8.5	n/a
-Construction	30.2	23.9	24.4	17.4	6.1	n/a
-Transport & Utilities	30.9	21.4	21.6	19.2	3.6	n/a
-Trade & Services	18.1	18.5	21.3	10.5	4.6	n/a

Notes: Includes households engaged in mining,manufacturing,transport and utilities and trade and services. n/a = Not available.
Source: Adapted from Nair 2010.

There was considerable progress made towards poverty eradication during the tenure of the Sixth Malaysia Plan and Seventh Malaysia Plan. During the Sixth Plan the overall incidence of poverty declined from 17.1% to 9.5% while the poverty incidence amongst Malaysians declined from 16.5% to 8.9%. A similar pattern was observed when incidences of hardcore poverty, urban and rural poverty were examined. The overall incidence of poverty amongst the hardcore poor declined from 4.0% to 2.2% while in the rural and urban sectors the decline was from 21.8% to 16.1% and 7.5% to 4.1% respectively. However a closer examination of the poverty trend data indicates that there were several sub periods during which both the Incidence of poverty (IOP) and the number of poor households have increased. For instance, in 1999 the IOP and the total number of poor households increased compared to 1997 and this trend was due to the impact of 1997 Asian financial crisis, which seriously affected the growth of Malaysia's economy and subsequently the livelihood of the people. Under the Eighth Malaysia Plan (2001-2005) the IOP and the number of poor households increased, between the years 2002 and 2004 (Table 2). The overall IOP increased from 5.1 to 5.7 percent while the number of poor households increased from 267,900 to 311,300. The incidence of urban and rural poverty increased from 2.0 to 2.5 and from 11.4 to 11.9% respectively with corresponding increases in the number of urban and rural poor households was from 69,600 to 91,600 and from 198,300 to 219,700 respectively. Hardcore poverty also increased in terms of its incidence from 1.0 to 1.2 with rural hardcore poverty incidence increasing from 2.3 to 2.9%. Urban hardcore poverty remained at 0.4%.The incidence of poverty declined dramatically between 2004 and 2007 with the over all incidence declining to 3.6% and hardcore poverty declining to 0.7%.

Table 2. Status of co-operatives by the year 1990-2007

Year	No. of co-op.	Membership (million)	Capital (RM billion)	Assets (RM billion)
1990	3,028	3.33	1.64	6.15
1991	3,083	3.44	1.75	6.55
1992	3,228	3.66	1.92	7.60
1993	3,388	3.91	2.18	8.33
1994	3,473	4.06	2.44	10.14
1995	3,554	4.25	2.74	10.39
1996	3,753	4.21	2.83	12.17
1997	3,847	4.13	3.17	12.96
1998	3,942	4.55	3.60	14.10
1999	4,050	4.33	3.84	14.10
2000	4,154	4.50	4.21	15.82
2001	4,246	4.76	4.3	18.90
2002	4,330	5.03	4.40	19.00
2003	4,,469	5.21	5.57	25.12
2004	4,651	5.39	6.06	25.70
2005	4,771	5.69	6.85	34.87
2006	4,918	5.86	7.36	38.38
2007	5,170	6.32	7.80	47.4

Source: Monitoring Division, Malaysia Cooperative Commission (MCC).

An examination of poverty by economic activities showed that the agricultural sector (which includes forestry, fishing and livestock), which was concentrated in the rural areas, has the highest IOP as compared to other sectors, such as, manufacturing, construction, and services, which were mostly found in the urban areas. However, the rate of IOP for the agricultural sector declined gradually from 68.3 percent in 1970 to 23.8 percent in 1984 (Table 1). The IOP for other sectors declined as well during this period, for instance, the IOP in manufacturing, which was at 23.5 percent in 1970 declined to 8.5 percent in 1984. In fact, poverty in all sectors declined significantly. In terms of occupational groups, poverty was relatively high among paddy farmers, fishermen and rubber smallholders in the rural areas. The IOP was 88.1 percent for paddy farmers, 73.3 percent for fishermen and 64.7 percent for rubber smallholders in 1970. Poverty in the 1970s was also evident amongst a wide range of low paying jobs in the services sub-sectors such as electricity, gas and water (3 percent), wholesale and retail trade, restaurants and hotels (2.9 percent), community, social and personal services (1.7 percent), transport, storage and communications (1.6 percent), construction (2.1

percent) and mining and quarrying sectors (2.0 percent). However, the total IOP in these sectors reduced sharply in the mid 1980s to less than 10.0 percent (Adnand, 1983; Shireen,1998).

Development of cooperatives and cooperative status in Malaysia

The present co-operative organizations have deep historical roots in the economy and are very ancient. The foundation of the Rochdale Equitable Pioneers' Society in 1844 has been acknowledged traditionally as the starting point of the true history of the modern co-operation movement. Lambert (1963) offers a lengthy discussion about the historical background of co-operation. In defining a co-operative, most co-operative literature would describe a co-operative as an independent and autonomous non-government organization which has been promoted by co-operative members themselves to achieve their economic and social objectives. The International Co-operative Alliance (ICA), in the statement of co-operative identity (ISCI) 1995 had defined co-operative as: "…an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise." Co operative as an organization operates and are managed based on values and principles first introduced by the Rochdale pioneers in the nineteen century (ICA, 2004; ILO, 2004; Smith, 2004). All co-operatives in Malaysia are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. Following the statement of co-operative identity 1995, Malaysian co-operatives also observe the seven universally accepted principles. The principles are: voluntary and open membership; democratic member control; member economic participation ; autonomy and Independence;education, training and information ; co-operation among co-operatives and concern for the community.

It was when Malaysia gained independence on 31st August 1957 the co-operative movement became strong and active. The first half of the 1960s saw a more effective consolidation and rationalization programme being undertaken by the Department of Co-operative Development (DCD) and the Bank Rakyat (Peoples' Bank). By 1966, the realization of the importance of inter-linked markets prompted the policy aimed at encouraging existing and new co-operative to develop into multi-purpose co-operatives. Structurally, co-operatives movement can be segmented into the flourishing urban segment which is financially strong and the rural segment comprises of various types of agro-based co-operatives, fishermen's co-operatives and co-operatives under the government agencies. Urban credit and banking co-operatives formed the backbone of the movement. Other primary societies include consumer co-operatives, co-operative housing societies, land development co-operatives and school co-operatives. The co-operatives supervised by government agencies such as Federal Land Development Authority (FELDA),Federal Land Consolidation Authority (FELCRA) and the Rubber Industries Small Holders Development (RISDA) served the rural community and their main functions are contractual work, transport service (lorries, buses and tankers), retail stores and mini-markets, and the supply of electrical appliances, motorcycles and furniture. In October 1990,the Department of Co-operative Development (DID) was under the Ministry of Land and Cooperative Development.This ministry emphaszied on creating more Workers Investment Co-operatives (WIC) Co-operatives operating in factories and in private companies.The objectives in the Sixth Malaysian Plan (1991-1995) were to have 500 WIC co-operatives and 1000 other co-operatives.The numbers of co-operative membership,capital assets for the years 1990 to 2007 is shown in Table 2.

From the year 1990 onwards the movement seems to be having a positive growth. Within the first eight years (1990-1997) the movement grew at 3.1 percent a year with the membership, capital and asset growth of 2.8 percent, 8.7 percent and 10 percent respectively.

The co-operative movement later was effected by the 1997 financial crisis that hit Malaysia and other countries in this region. Fifty two co-operatives with investment in shares and trust funds especially with borrowings from the private financial institutions suffered the worst from the crisis. They faced liquidity problems and had received some form of help from the government to ease their financial problems (Hayami Md, et al. 2008).

Despite the crisis the movement recovered with progress in the share market following the economic recovery. As shown in table 2, although the economy was not good the co-operative movement showed only a slight decrease in growth from 1997-2000. Co-operatives grew at 2.57 percent, membership at 1.8 percent, capital at 10.47 percent and asset at 6.87 percent. Co-operatives in the 21st century (2000 - 2007) grew at an increasing growth rate of 3.1 percent, membership at around 4.9 percent, capital at 9.5 percent and asset growth rate at 17 percent. By December 2005, there were 4,771 co-operatives registered with 5.685 million members, share capital amounting to RM 6.849 billion and total assets worth at RM 34.868 billion (DCD 2006). All co-operatives are classified into 9 different functions based on their business activities. The functions are banking, credit/finance, plantation, housing, industry, consumer, construction, transport and services. The performance of co-operatives by functions is shown in table 3. The table shows 62 per cent of the co-operatives focus on providing consumer, 10 percent provide services, 9 percent are involved with credit, and 8.6 percent are in transportation, 2.1 percent in construction, 1.7 percent in housing and 1.2 percent are in industry. The movement has 2 co-operative banks that is the Bank Rakyat and Bank Persatuan. The status of these co-operatives by number, membership, capital, assets are also indicated in the Table 3.

Table 3. Status of cooperatives by functions as at 31 December, 2007

Function	No. of Coop.	Membership	Capital (RM)	Assets (RM)
Banking	2	841,448	2,147,940,644	35,257,320,857
Credit/Finance	471	1,933,857	3,970,239,842	6,917,854,753
Plantation	272	203,876	207,323,893	1,033,019,696
Housing	90	91,545	118,795,528	454,929,244
Industry	63	10,498	2,619,012	37,028,588
Consumer	3,188	2,607,452	240,074,918	919,621,555
Construction	109	47,087	15,008,229	53,152,584
Transport	445	158,787	60,817,787	214,005,931
Services	503	380,360	1,072,288,793	2,515,951,483
Total	5,170	6,318,758	7,787,422,143	47,401,984,686

Source: Monitoring Division, Department of Co-operative Development, Kuala Lumpur.

Taking these statistics as indicators of performance, these figures had portrayed that co-operatives have had the support of the people and had performed activities that may have contributed to the economic growth. Despite these progresses, co-operatives in Malaysia seem to be at a cross roads due to stiff competition and challenges from other institutions and organizations that are also expanding and developing rapidly with increased opportunities in and outside Malaysia.

The co-operative movement is facing problems and challenges that need to be address by the co-operative themselves and the government. In the National Co-operative Policy (NCP) 2002-2010 the Ministry in charge of co-operatives had acknowledged that majority of co-operatives are small in size and capital, they are facing members apathy problem and have very poor networking among them. They are also facing problem generating and getting sufficient capital to implement their activities. Most co-operative are dependent on the conventional sources of capital which is the share capital, fee and accumulated profits. Among co-operatives with access fund, these are not being utilized economically but are channeled to other non co-operative financial institutions (MLCD, 2003). In the long run these problems will hinder co-operative performance and co-operative will not be able to contribute to the economy. A large proportion of the co-operatives are still being managed by boards on a voluntary basis and not by the full time professional manages as in the bigger and more successful co-operatives (Harian,2006). This creates difficulty for co-operatives to maintain good governance, inefficient administrative and poor financial management. As of July 2006, it was announced that 9.8 percent of the 4,771 co-operatives were inactive.In this year a total of 217 co-operatives were under liquidation. (DCD, 2006).

The role of cooperatives in risk and poverty alleviation

Malaysian co-operatives have had quite a long history of playing a significant role in poverty eradication. Tebuk Haji Musa Co-operative in Parit Buntar, Krian, Perak was the second co-operative to be registered in 1923. This co-operative was set up by the farmers and peasants who were by and large poor, who had no savings, and exploited by local moneylenders, traders and shopkeepers. Not only were they made to pay exorbitantly high rate of interest for their loans, but also to sell their produce to the particular trader at very low prices. Most of the farmers ended up mortgaging their crops and their land. Rural co-operatives credit societies and banks became important in the early years in Malaya with membership numbered over 60,000 people mainly paddy-planters and rubber small-holders. Loans from co-operatives helped them pay their living expenses and improve lives. The Employees Co-operative Credit Societies" formed among the employees mostly from the rubber estates had played a significantly role in helping eradicating poverty among estates workers (Kularajah, 1963).Thrift and loan societies had also played a great role in encouraging thrift and in giving credit to members at very low rates of interest (Kularajah, 1963).

The Challenge of cooperatives in Malaysia and the realization of vision 2020

Co-operative development has been affected by globalization, liberalization, deregulations and changes in government policies. Following this co-operative philosophy, concepts and identity are being challenged by both the external and internal forces (Hayami Md *et al*., 2008). Despite this, the government had and still perceives to have played an important role towards the formation, promotion and continued growth of co-operatives in Malaysia. Technical assistance in the form of seconding government officers to the co-operatives in the land development schemes (under agencies such as RISDA, FELDA, FELCRA) to assist the co-operatives during their initial development stage were given. The officers help to supervise and manage these co-operatives with the intention of withdrawing their service once the settlers are capable of managing the more matured societies themselves.

The Fourth Malaysia Plan (1981-1985) clearly outlines the government's policy on co-operatives. It states that: "The co-operative movement provides an important vehicle for the promotion of economic activities, mobilization of capital and the acquisition of property." The Department of Co-operative Development was given an allocation of RM49.55 million to carry out its development programmes. Out of this amount, an allocation of RM41.71 million was given as financial assistance to small co-operatives in the form of advances at a low rate of interest for financing potentially viable projects. This assistance was given to deserving co-operatives which do not qualify for normal bank loans. The Federal government has since then allocated a substantial amount from the national budget for co-operative development.

Under the Fifth Malaysia Plan (1986-1990), a sum of RM33.07 million has been allocated by the government for co-operative development. Out of this amount, RM26.36 million was for loans to co-operatives: RM4.5 million as subsidies for school and other co-operatives initiated by government and RM1 million for the purpose of intensifying member education activities undertaken by the Department of Co-operative Development. Since 1986, the government had taken steps to introduce the formation of workers' co-operatives amongst the unemployed graduates. The aim of the co-operatives was to group graduates together, in order to pool their resources and skills so that they can be co-owners and co-workers of some business or economic venture for mutual benefits. A management subsidy was also given to school co-operatives so as to enable them to employ workers to manage their business efficiently. In 1986, 300 school co-operatives were given RM100 each as management subsidy and a loan of RM200, 000 was given to the National School Co-operatives. The apex organization of the Community Development Co-operatives which co-ordinates and acts as a supplier to the other CDCs were also given a loan of RM1 million in April 1986 for the purchase of cement to be supplied to the CDCs The Department has provided a total loan of RM65 million at 2% to 4% interest rate for the period 1978 to 1993 to co-operatives in Malaysia.

Under the Sixth Malaysia Plan (1991-1995), the DCD were given an allocation of RM12.75 million. From this amount a sum of RM450, 000 is for the promotion of consumer activities and another RM3.85 million is for the development of school co-operatives (many of which are actually undertaking consumer activities). the balance are for the activities of the Village Industrial co-operatives, Districts Development Co-operatives and for co-operative training's. Besides financial assistance, technical assistance was also given to facilitate co-operative growth in their initial stage of formation. The Eighth Malaysia Plan (2001-2005) had incorporated strategies, programmes and projects designed to achieve the National Vision Policy. The objectives are of sustainable growth, strengthen economic resilience as well as create a united and equitable society. In this plan a total of RM 33.2 million was allocated for co-operative development.

The National Co-operative Policy (NCP), 2002-2010, was launched in 2002 to provide for the orderly re-development of co-operatives. This is the first national policy on co-operative development since independence. NCP however was introduced in details later in 2004 to all co-operatives to encourage co-operatives to play a bigger role and to participate actively in the economic growth of the country. NCP envisaged a co-operative movement which is active, strong and self-reliant and the government as the movement‟s regulator. It outlines the short and long term goals of the NCP and eight strategies of achieving the NCP‟s objectives. This policy is in line with the other development policy such as the Vision 2020 and the National vision Policy (DCD, 2003).

These strategies will yield meaningful result depending on how cooperatives are able to tackle the problems they face. Prakash (2000) noted that experiences of agricultural cooperatives and the results of various studies have identified several factors which are responsible for the success of agricultural cooperatives. Some of them are relevant to the further advancement of agricultural cooperatives in Malaysia (Figure 1).

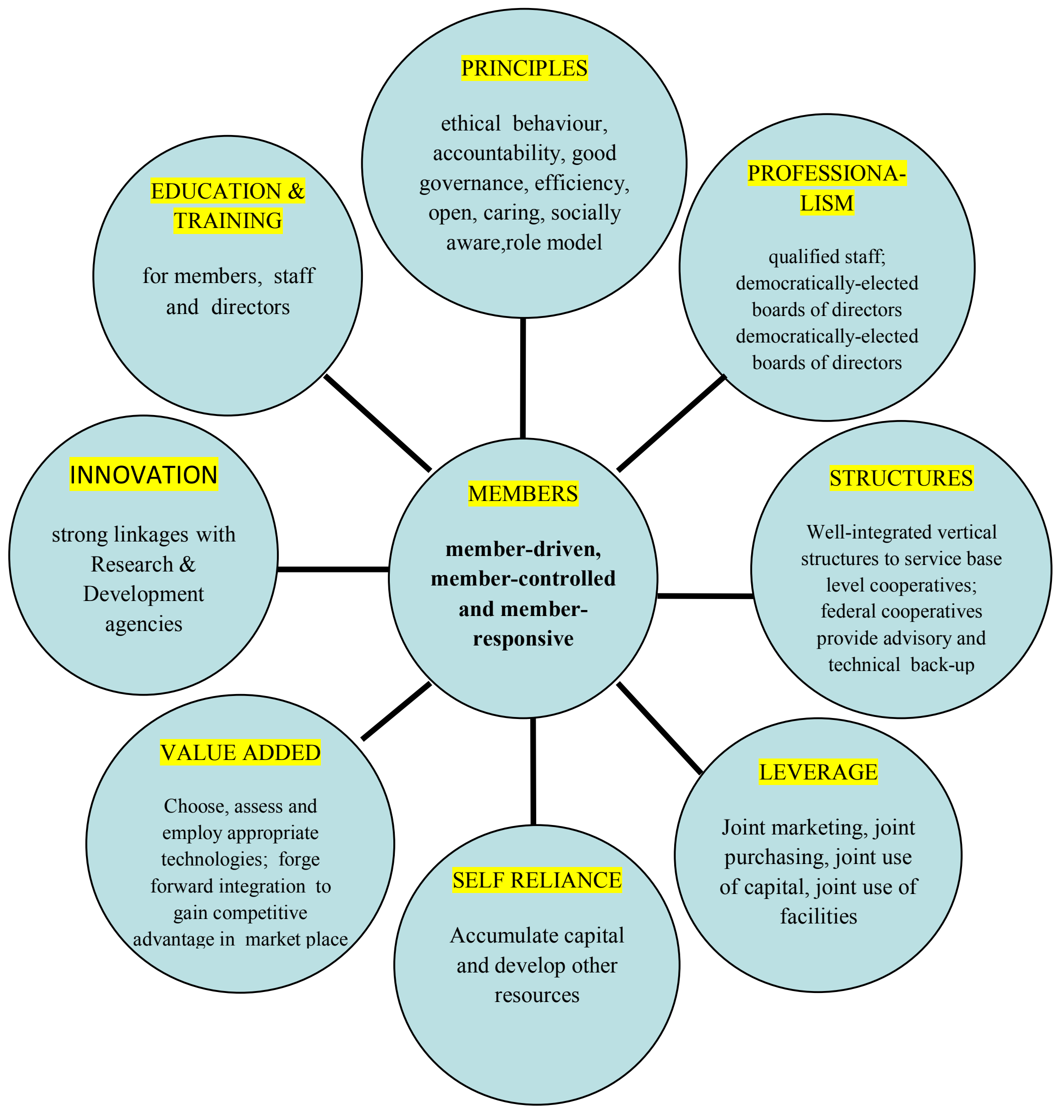

Figure 1. *The way forward for Malaysian agrivcultural cooperatives*

Conclusion

Agriculture in developing countries in which the poor predominantly operate is a fragile and risk-prone sector. A plethora of risks and uncertainties surrounds the livelihood of rural poor. Agriculture is often characterized by high variability of production outcomes or production risk. Risk mitigation, risk management and risk reduction is inevitable to reduce poverty in the agriculture sector. Despite having elaborate mechanism, poor households are not capable to eliminate vulnerability unless rendered extensive support. Governments and developments agencies, therefore, need to develop socio-economic safety-nets and instruments to eliminate risks from the lives of the poor (World Bank, 2000).

The Malaysian experience shows that agricultural cooperatives were able to promote economic empowerment of the poor by enabling them to cope with the uncertainties occassioned by the very nature of their agricultural vocation. However,for this aim to be fully realised,the cooperatives must be less dependent on government-support and more self-reliant by accumulate and exploring other sources of capital and funds. With greater autonomy and freedom the prospects for Malaysian agricultural cooperatives to flex their muscle and soar high are promising.

References

Agwe J, Azeb F (2009) Managing risk in financing agriculture. Proceedings of Expert Meeting Convened and Co-sponsored by ARACA, FAO, the Land Bank of South Africa and the World Bank. Johannesberg - South Africa, April 1-3.

AIT/UNEP (2010) *Assessment of capacity gaps and needs of South East Asia Countries in addressing impacts,vulnerability and adaptation to climate change*. Bangkok, Thailand, March.

Anand S (1975) *The size distribution of income in Malaysia*. Mimeograph, Development Research Center, IBRD.

Andersen RJ (2001) *Risk and management in rural development:A Review*. Rural Strategy background paper No.7, Rural development, World Bank [cited 7th April 2011]. Available from: http://www.worldbank.org/poverty ruraldevelopment/background/andersen.

Anderson JR, Dillion JL (1992) Risk analysis on dryland farming systems. *Management Series* 2. FAO, Rome.

Birchall J (2004) *Co-operatives and the Millennium Development Goals*. ILO-COPAC, Geneva.

Chambers R (1989) *Vulnerability,coping and policy*. Editoral Publication unit,Sussex.

Davies S (1996) *Adaptable livelihoods: Coping with food insecurity in the Malian Sahel.* Macmillan Press ltd., Great Britain.

DCD (2003) Department of Co-operative Development Malaysia. National Co-operative Plan and Action Plan, 2003.

DCD (2006) Department of Co-operative Development Malaysia. Towards enhancing co-operative entrepreneurialship. Paper presented at MPKK Meeting, 5 th of September 2006, Eastin Hotel, Petaling Jaya, Selangor.

De Janvry A, Elisabeth S (2002) World poverty and the role of agricultural technologgy: Direct and indirect effects. *Journal of Development Studies* **38** (4), 1-38.

Fefchamps M (1999) Rural poverty, risk and development. Center for African Studies, Oxford University. Report submitted to the Food Agriculture Organization (FAO). Available from: http://www.economies.ox.ac uk/members/maral fefchamps/homepage.

Fleisher B (1990) *Agricultural risk management*. Lynne Rienner, Boulder.

Fredericks LJ (1986) *The co-operative movement in West Malaysia, policy structure and institutional growth, Kuala lumpur.* Department of Publications, Univerty of Malaya.

Hagen H (2004) *ILO Recommendation 193 in practice – Co-operative values and principles in national legislation.* Paper for ILO/ICA conference April 2004. ILO, Geneva.

Harian B (2006) *9.8 % kes koperasi terbiar tidak serius*. 23rd July 2006.

Hayati Md. Salleh, Ashaari Arshad, Ahmad Faizal Shaarani, Nprbiha Kasmuri (2008) *Gerakan koperasi di Malaysia.* Co-operative College of Malaysia, Selangor.

ICA (2004) *Weekly digest*. International Co-operative Alliance, Geneva.

Imoisili C (2001) *The role of cooperatives in poverty alleviation*. Paper presented at the 44th Annual International Convention/Annual General Meeting of the Caribbean Confederation of Cradit Union, CCCU, at the Maha Resort. St Marrten Netherlands Antlles,West Indies,Wednesday18th July.

Irz X, Lin Lin, Thirtle C, Wiggins S (2001) *Agricultural productivity growth and poverty alleviation. Development Policy Rreview* **19** (4), 449-466.

Jain RCA, Parshad M (2007) *Risk management in agriculture*. Report of the working group on risk management in agriculture for the Eleventh Five Year Plan (2007-2012). Government of India Planning Commission, New Delhi.

Kularajah NA (1968) *Introduction to the co-operative movement*. The Malaysian Co-operative Printing Press Society Ltd, Selangor.

Lambert P (1963) *Studies in the social philosophy of co-operation.* Co-operative Union Ltd. Edition, Manchester.

Lipton M, Sinha S (1999) *Damaging fluctuations, risk and poverty - A review*. Background paper for the World Development Report 2000/2001. Poverty Research Unit Sussex (PRUS) [cited 18 March 2002]. Available from: www.worldbank.org/poverty/wdrpoverty/background/Sinha Lipton PDF. Washington DC.

MLCD (2003) Malaysia, Ministry of Land and Co-operative Development 2003, National Co-operative Plan and Plan of Action, 2002-2010.

Nair S (2010) *Moving forward: Its poverty agenda challenges, dilemmas and options for Malaysia*. Paper prepared for CPRC 2010 Conference, 8-10 September.

Othman A, Kari F (2008) *Enhancing co-operatives movement to achieve Malaysia's development goals.* Paper delivered at the ICA Research Conference in riva del Gardea,Trento Italy, October 2008.

Prakash D (2000) *Development of agricultural cooperatives-relevance of Japanese experiences to developing countries*. Paper presented at the 14th ICA-Japan International Training Course on "Strengthening Management of Agricultural Cooperatives in Asia" held at IDACA-Japanon, April 18.

Robinson LJ, Barry PJ (1987) *The competitive firm's response to risk.* MacMillan, New York.

Smith S (2004) *Promoting co-operatives: A guide to ILO Recommendation 193*. The Co-operative College, Manchester, UK.

UN (2003) *Co-operatives in social development.* Report of the Secretary General A/58/159 United Nations General Assembly.

UND (1997) *Human Development Report, 1997*. United Nations Development Programme (UNDP). Available from: http:// www.undp.org/hydro/e97over.htm.

World Bank (2000) *Attacking poverty*. Oxford University Press.