

## **Towards a sustainable approach to clustering small-scale farmers to market their agricultural produce**

*Roy Murray-Prior, r.murray-prior@curtin.edu.au*  
*Peter J. Batt*  
*Curtin University, Perth, AUSTRALIA*

*Sylvia B. Concepcion*  
*Malou O. Montiflor*  
*Jerick Axalan*  
*Ruby J.G. Lamban*  
*Rodel R. Real*  
*University of the Philippines Mindanao, Davao, THE PHILIPPINES*

*Floro Israel*  
*Ricarte G. Bacus*  
*Dante I. Apar*  
*UPSTREAM, University of the Philippines Mindanao, Davao, THE PHILIPPINES*

### **Abstract**

The University of the Philippines Mindanao and Curtin University have been organising small-scale vegetable farmers in Mindanao into cluster marketing groups to improve their access to markets and returns from the sale of their vegetable products using the 8-Step Clustering Approach for Agroenterprise Development developed by the Catholic Relief Services (Philippines). This paper reports on an action research investigation with around 30 marketing clusters. Cluster marketing has led to: better and wider market access, improved prices, reduced costs, improved human capital and social capital, and higher incomes. However, the current process may not lead to sustainable cluster marketing without support and may lead to dependency. This paper discusses strategies to overcome key challenges identified and deficiencies in the current process and suggests changes to the 8-step process so that it may improve the chances of cluster success and sustainability.

### **Introduction**

Smallholder vegetable farmers in the Philippines struggle to compete in an increasingly globalised environment, particularly with the entry of the Philippines and China into the World Trade Organisation and the increasing sales of vegetables through supermarkets rather than traditional wet markets. While the presence of high value chains would seemingly provide an opportunity for smallholder farmers, the need for consistency of supply, quality assurance and traceability are serious hurdles to their participation. Traditional supply chains operate in an environment of diseconomies of size, poor infrastructure, poor access to inputs, credit and information, and high transaction costs (Murray-Prior, 2008). In these markets there is little incentive or ability to provide market signals for quality and consequently quality is poor and highly variable. In the past, smallholder farmers in the Philippines were organised into cooperatives, but many of these cooperatives were unsuccessful (Murray-Prior, 2008). Many of these failures appear to be related to lack of a comparative advantage for the cooperative over alternative marketing arrangements and difficulties in maintaining trust in the cooperative and its management. However, poverty, illiteracy, low status and low power also make it difficult for smallholder farmers to collaborate successfully.

The University of the Philippines Mindanao and Curtin University (Perth, Western Australia) have been organising small-scale farmers in Mindanao into cluster marketing groups to improve their access to markets and returns from the sale of their vegetable products. Cluster marketing groups are formed by growers who commit to work together to market their product (Montiflor et al., 2008). Clusters are either area based, where neighbouring

farmers combine to market one or more vegetables; or commodity based, where farmers agree to plant a particular vegetable crop and combine their product for sale. The clustering has been based on the 8-Step Clustering Approach to Agro-enterprise Development for Small Farmers developed by the Catholic Relief Services (CRS-Philippines, 2007). This paper reports on some initial findings of an action research investigation funded by the Australian Centre for International Agricultural Research that seeks to overcome the key challenges for cluster marketing groups and suggest changes to enhance the 8-step process to improve the chances of cluster success and sustainability.

## Method

The methodology used to investigate the CRS clustering approach involves an integrated Participative Action Learning and Action Research Process with over 30 cluster marketing groups in Mindanao in Davao City and the provinces of Bukidnon and South Cotabato. The CRS Clustering Approach to Agroenterprise Development is referred to as the 8-step clustering approach (CRS-Philippines, 2007), the 8 steps of which are summarised in Fig. 1.

It begins with identifying the project site, building partnerships with farmers and other stakeholders such as local businesses, local government and NGOs and forming a working group. Step 2 is a participatory process in which the working group identifies the community's resources, products, and production and marketing practices and then decides on the product or products that will be the focus of the cluster group. Step 3 involves the working group undertaking a market chain study. Farmers are trained in market chain studies and conduct market visits in which they develop understanding of the chains for their selected products and conduct initial negotiations with potential buyers.

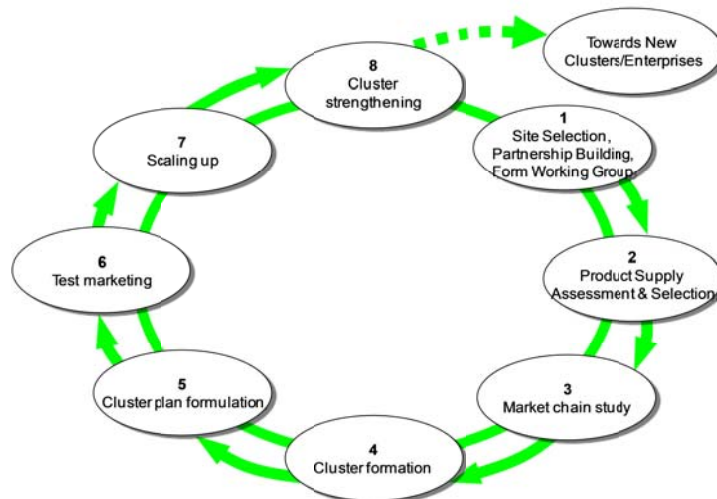


FIG. 1: 8-STEP PROCESS OF THE CLUSTERING APPROACH TO AGROENTERPRISE DEVELOPMENT

Step 4 is the cluster formation phase, in which interested farmers are invited to participate and are provided an orientation on what has been found from the previous phases. The cluster is then formed, leaders selected and a basic cluster agreement and objectives are agreed. Step 5, or cluster plan formulation involves planning a planting and harvest calendar for the products of the cluster and deciding on the test marketing plan which consolidates market, supply, management and financial plans. The test marketing activities of Step 6 involve at least four trial product deliveries. After each, meetings are held to assess performance and adjust the plan to enable improvements. After the test markets are judged successful, the next Stage 7 involves planning and conducting a scaling up process. Readiness for scaling up is appraised against criteria that assess cluster willingness, level of product supply, market performance, management performance and financial trends for the cluster. Scaling up involves producing more products or additional products to supply the existing markets or to more diversified markets. The final step of cluster strengthening involves undertaking activities that expand cluster capacity and networks with other clusters

and businesses. The objective is to improve cluster maturity. Detailed information about the CRS clustering approach can be found in the booklet entitled 'The Clustering Approach to Agroenterprise Development for Small Farmers: The CRS-Philippines Experience' (CRS-Philippines, 2007).

### **Action Research on the CRS Clustering Approach**

The University of the Philippines Mindanao through its UP Strategic Research and Management Foundation (Upstream) has taken over some existing CRS clusters and facilitated the establishment of additional cluster marketing groups in Davao city, Bukidnon and South Cotabato. These groups have been taken through the CRS 8-step process by field officers from Upstream, which is essentially a Participative Action Learning process for farmers. At the same time, research officers from the University of the Philippines Mindanao are involved in an Action Research process which documents each group's activities and investigates issues as they arise; such as problems with and solutions to the financing issue and changes and improvements to the clustering process. Surveys have been conducted of farm household resources and production activities and the relationships between farmers and wholesalers and traders, farmers and the cluster, clusters and traders, wholesalers and institutional markets and back the other way. Case study reports are prepared on each cluster and on selected farmers within the clusters. Findings from these investigations, discussions between the researchers and field officers and evidence from the literature and experiences of the researchers, field officers and farmers are used to identify and evaluate changes to the clustering activities and process.

This combined Participative Action Learning and Action Research process has identified that an enhanced clustering process has to incorporate processes that overcome issues such as: input financing arrangements to replace loans from informal moneylenders and traders; risks associated with production failures; maintaining relationships with buyers; and building group resilience and independence so that donor agencies have an exit strategy.

### **What to do about the input financing problem**

Smallholder farmers in the Philippines and elsewhere have limited or no access to the formal lending sector. Thus they have to rely on informal moneylenders including local traders, landlords, commodity wholesalers and other village moneylenders (Robinson, 2001; Llanto, 2007). These loans are often at rates well above those charged by commercial microfinance institutions (Robinson, 2001; Llanto, 2007) because the markets sometimes have characteristics of monopolistic competition (Robinson, 2001). However, when smallholder farmers market their produce through a cluster marketing group, such as those created using the CRS 8-step clustering process, the farmers may not have access to loans from local traders and commodity wholesalers. These lenders often loan money for inputs on the expectation that they will be able to buy and market the product at prices which are advantageous to them and sometimes threaten smallholders with not lending money or buying their product if they sell through a cluster. This appears to be a fairly common phenomenon (Llanto, 2007).

Some authors (Llanto, 2007; Campaigne & Rausch, 2010) suggest that lending to farmers who are connected to an integrated supply chain is more feasible. Some of the cluster groups from the Bukidnon and South Cotabato provinces have had access to finance through microfinance institutions, partly because they are organised groups. However, their outcomes have been mixed (Axalan et al., 2010; Real et al., 2010). When production fails due to weather or disease problems, farmers who have loans from microfinance institutions face additional burdens which can affect both the viability of the cluster and its marketing arrangements and also lead to default on repayments by farmers. In Bukidnon (Real et al., 2010), squash, sweet pepper and bitter melon clusters were unable to meet their contractual obligations to deliver produce due to disease and weather problems. Since the loans had been obtained because the farmers were members of a cluster marketing group, some clusters had farmers who withdrew because they expected they would be liable to repay the loans of cluster members. On the other hand, members of a sweet pepper cluster in South Cotabato who received loans from a microfinance institution had fewer problems, partly because they did not have the same level of production failures, but also because of the way in which their loans were structured (Axalan et al., 2010). Other clusters from the Davao City area do not have access to microfinance and therefore have to self finance or obtain some funding from informal money lenders.

In light of the literature on microfinance, there are some possible lessons to be drawn from these examples. Firstly, microfinance loans can increase the risk to farmers because they lead to greater investment in inputs, which may not be recovered if production problems occur. Often farmers involved in new cluster marketing groups are involved in learning about and implementing many new and interrelated behaviours. Adopting new behaviours and crops is inherently risky, but in this case farmers are adopting new marketing arrangements, often growing new or expanded areas of crops, and are learning to cooperate to produce, market and deliver their crop to a particular market at the particular time. If farmers in the early stages of the clustering are provided with loans, the combination of these risks can leave farmers and clusters in a perilous financial position, as happened to the clusters in Bukidnon.

Secondly, in one case the loan was linked to a particular crop and marketing arrangement (Real et al., 2010). The microfinance institution lent the money on the expectation that the crop would be sold through a particular agent who would deduct loan repayments and pay the farmers the remaining money. When production difficulties arose, the agent didn't accept the clusters' product and hence repayments were not made. Since the repayments had been linked to a particular crop and payment arrangement, the farmers did not feel as obligated to repay from other sources.

Thirdly, some of the loans made to clusters in the Bukidnon province were based on overoptimistic assumptions about yields and prices (Real et al., 2010). As indicated above, in the early stages of clustering, farmers are learning and adopting many new skills and behaviours and the likelihood of failure is high. Consequently, budgeting for loans must be conservative to allow for the level of production and price risk. This decreases the risk of over indebtedness. Also our experience is that loans should only be made for physical inputs such as seed, fertiliser and pesticides and that the farmers need to finance part of the crop out of their own resources. Hermes and Lensink (2007) suggest that credit rationing can increase the likelihood of loan repayment, which is consistent with this view. In addition, there is some evidence from our clusters that loans are only necessary for crops that are more expensive to grow and not for all crops, at least in the initial trial stages of the process. As farmers gain experience with crops and cluster marketing and expand production, loans may become more necessary.

Fourthly, a comparison of the lending strategies followed by the microfinance institutions in Bukidnon and South Cotabato and their successes and failures supports some of the principles underlying the Grameen Bank and the Association for Social Advancement methods (Llanto, 2007). These include compulsory savings or capital build-up, progressively larger loans based on demonstrated competence, and financial education for loan recipients in budgeting, saving and managing debt (Llanto, 2007; Cohen, 2010).

Finally, donor agencies need to be careful when promoting and supporting loans to cluster marketing groups, because it can lead to the impression that the loans are a gift. Farmers are used to charitable institutions providing gifts and even where the loan is provided by a microfinance institution, if it is linked to the support of the donor agency for the cluster marketing group, it can be perceived as a handout. Our experience with loans to the Bukidnon clusters suggests this was a contributing factor to problems with repayment by at least some farmers.

## **Risks associated with production failures**

Vegetable farming in the Philippines can be a risky business with production quantity and quality varying widely due to climatic conditions and pest and disease outbreaks. Dry periods can lead to poor crop emergence and growth, while wet periods can dramatically affect flowering, product quality and yield. Wet weather also intensifies fungal diseases, which can increase costs of control and/or dramatically reduce yields. Similarly, poor seed selection can result in disease outbreaks (as occurred for the bitter gourd cluster), while pest and disease outbreaks can occur as a result of climatic conditions, poor rotations or poor crop hygiene. These variations in yield and quality not only reduce farmer returns, but also make it more difficult for clusters to be consistent suppliers to institutional markets.

One strategy to manage the risk is to adopt lower input and lower yield production systems that require lower financial outlays and reduce yield variability. Many clusters are in relatively remote areas, so imported fertilisers and pesticides are expensive and difficult to obtain reliably. Consequently farmers have been investigating use of organic and 'natural farming' (Jensen et al., 2006) systems. These systems use local inputs, such as organic fertilisers, pesticides and composts. Further investigation is needed to see what effects these systems have on levels and variability of yield and quality.

Another strategy is for the cluster to only commit a proportion of their expected yield to a particular buyer, particularly if this is an institutional buyer who wants consistent supply. A common figure is 60% of a conservative estimate of yield, although this varies depending on the crop and the number of buyers. This strategy has additional advantages in that farmers are then free to sell their surplus product to other buyers, particularly if there is a spike in prices. They can also maintain their relationships with traditional buyers who provide other services such as credit. It also spreads their risk if one of their buyers defaults or refuses to accept product for whatever reason.

## **Maintaining relationships with buyers**

Modern value chains have mostly been developed in advanced economies and are therefore suited to medium to large farmers because they require consistent quantity and quality of supply and processes for ensuring food safety. Smallholder farmers in the Philippines have little understanding of these markets because they have traditionally only dealt with local traders, rarely visit the wet markets where most of their product ends up, and almost never interact with institutional markets associated with value chains. The clustering process tries to overcome this deficiency by training farmers to conduct their own market chain studies, including talking to buyers from the various markets. Farmers are also taught negotiating skills, which improves their confidence and ability to negotiate prices, volume and quality with institutional and other buyers. However, smallholder farmers generally take some time to develop their knowledge of market operations and requirements and this can create misunderstanding and conflict between the cluster and buyers - especially institutional buyers. Conversely, institutional buyers often come from cities and have little understanding of the constraints faced by smallholder farmers which exacerbates misunderstanding and conflicts with smallholder farmers. This combination has led to the breakdown in relationships between buyers and clusters and smallholder farmers.

One additional strategy to reduce the effect of this issue that forms part of the clustering process is the series of test marketing activities that are conducted as part of Step 6. After each trial, the performance of the clusters trial product deliveries is evaluated in terms of the quantity and quality of the product that was delivered versus what was planned. However, there can still be misunderstandings between the cluster and their buyer and sometimes the donor agency has to facilitate a discussion about the causes of the misunderstanding. Sometimes the problem is with the farmers, but equally sometimes the problem is with the buyer who can try to take advantage of the farmers, possibly because that is what they have been used to doing.

This is a learning process for both sides and it appears that in some cases it requires a couple of years, including periods where the cluster sells to other buyers, before a sustainable relationship is achieved. In other situations, a sustainable relationship may not be possible due to a whole range of reasons. The donor agency that is facilitating this process needs to have patience and to act as an honest broker by not taking sides and attempting to identify the root causes of the problem. It is important for farmers to be involved in discussions and negotiations with the institutional buyers as this is the only way in which understanding and mutual respect can be gained and sustained. One method that has helped is for the buyer to be taken to the farms where the product is grown to give them an appreciation of some of the difficulties faced by the farmers in getting a quality product to market.

## **Enhancing the clustering process**

Cooperatives and cooperative marketing arrangements have a poor record in the Philippines. Many of these cooperatives were set up for political reasons such as agricultural development, pacification of revolutionary activities and distribution of subsidised inputs. Most failed when institutional supports were removed. Outside support can enhance the chances of success of smallholder cooperatives (Murray-Prior, 2007), but it can encourage dependency which means the cooperatives are not sustainable once external support is withdrawn (Shigetomi, 2006). If cluster marketing is to be a successful alternative, processes have to be developed that develop resilience in the groups so that they can survive with minimal external support. This also implies building in an exit strategy to the clustering approach to agroenterprise development. In this section we discuss this issue with a view to hypothesising a framework for the clustering approach to agroenterprise development that will develop resilience and build in an

exit strategy for any donor agency using the process. It is based on our experiences with the CRS 8-step process, other experiences with collaborative marketing groups and the literature on this issue.

Two key factors important to the success of cluster marketing arrangements are a comparative advantage over alternative marketing structures and trust in their fellow cluster members and its management (Murray-Prior, 2007). The clustering approach addresses the first of these issues through its focus on developing a marketing plan and its test marketing activities. The group is unlikely to form unless they see a comparative advantage for cluster marketing over their existing marketing arrangements. The second issue is addressed in a number of ways (CRS-Philippines, 2007). Firstly, the process is participatory and transparent and considerable effort is devoted to activities including involving cluster members in conducting the market chain investigations and development of the production plans, and keeping records on deliveries and payments that are accessible to all members. The cluster agreement, cluster enterprise plan, review of test marketing activities and business policies and systems are all developed by members. Regular meetings of the cluster are a feature and the leadership team is elected by the members. Numbers in each cluster are normally kept to 15 or less so that trust can be maintained through group pressure. In addition, the clusters and their leaders receive training in group processes and leadership. The evidence from the trust measures collected by the research officers indicate that currently cluster members have high levels of trust in their cluster.

While comparative advantage and trust are essential to the successful operations of cluster marketing groups they are not sufficient, nor are they guaranteed in the long run. We propose a framework that builds on and enhances the processes outlined in the CRS 8-step process. It incorporates three phases: Phase 1 - Establishment; Phase 2 - Building Resilience; and Phase 3 – Implement an Exit Strategy. Each of these phases is a type of Participatory Action Learning cycle and contains a series of steps that may be repeated depending on the maturity of the group.

#### **Phase 1: Establishment**

This phase essentially follows the first six steps of the CRS process (CRS – Philippines, 2007) with minor modifications and normally takes from 1 to 2 years. In Step 1 (Site selection, partnership building and formation of working group), greater emphasis needs to be put on investigating input financing arrangements, both the existing informal lending arrangements and potential microfinance lenders if farmers are not involved with them already. Orientation needs to be provided on saving, loans and financing alternatives in addition to the orientation on marketing that is currently provided.

In Step 2 (Product supply assessment and product selection), potential crops and products should be considered rather than decided on. This product selection is to be re-evaluated in Step 3 (Market chain study) which is expanded to include an investigation of input requirements for particular crops, potential sources and costs of those inputs and the ability of farmers to finance these inputs. At this stage financial institutions may be invited to contribute to the discussion as part of the consideration of the risks associated with growing and financing potential crops.

Similarly in Step 4 (Cluster formation), the normal process of orientation on marketing basics and clustering needs to be broadened to include briefing on production issues, sources of inputs and financing implications of particular crops. At this stage it should be emphasised that individuals will have to self finance, or arrange their own loans through the finance institution, and that financing is not the responsibility of the cluster. In this context it is interesting that there is evidence in the literature that individual-based lending is more profitable and that the Grameen Bank and BankSol (from Bolivia) are now using individual-based loans (Hermes & Lensink, 2007). Step 5 (Cluster plan formulation) would then proceed essentially as normal. The Test marketing step (Step 6) would go through a number of stages including:

- Assessing cluster commitment and capability of members
- Identify information and training needs and conduct trainings to overcome deficiencies
- Evaluate buyers and establish a good working relationship
- Make refinements to agroenterprise plan.

The next step is a linking step to Phase 2 (Building Resilience) in which the group decides whether to stop or continue deliveries and whether it is ready for scaling up. The criteria for these have been outlined in a table on

page 122 of CRS-Philippines (2007) and the group and the group facilitators use these criteria to decide whether they are ready for the next phase.

## **Phase 2: Building Resilience**

The focus of Phase 2 is essentially cluster strengthening and capacity building – an expansion of Step 8 (Cluster strengthening) in the CRS process. In our experience, groups will often go through periods of decline in activity, often caused by production or marketing problems. Marketing problems may sometimes be caused by a lack of capacity and immaturity in the cluster, but can also be caused by buyers not paying or complying with their agreements. For instance, some problems experienced by cluster groups with key markets include buyers' cheques not being honoured, buyers who won't accept their product because of problems with their processing activities and buyers who try to decrease prices or change quality specifications without consultation with the farmers. Problems like these have the potential to cause a collapse of the cluster, but equally if the donor agency is able to support the cluster in developing strategies to deal with these problems, the clusters develop confidence in their own abilities and are in a better position to deal with future issues without assistance. Kaganzai et al. (2009) argue that this 'repair and maintenance' support from donor agencies may be necessary in the scaling up phase of collaborative marketing groups. In fact, it could be argued that one of two of these difficult periods is part of the process of developing resilience. Production problems have been overcome by approaches including establishing links with seed companies to provide better quality seed and changing production practices with the assistance of local government advisers. Marketing problems have been solved by farmers going out and identifying new buyers and markets and subsequently diversifying their markets. In this Phase the role of the donor agency is to provide assistance when the cluster is struggling, to help enhance their networks and to build capacity. Less direct assistance is provided and the group is encouraged to draw on their own resources. The steps in this process are essentially an adaptation of the steps in the Establishment Phase. They include:

1. Revisit the product supply assessment step and assess training a support needs to produce the product.
2. Undertake a further market chain study with a view to assessing their performance in meeting their markets' needs, identifying additional markets and selecting the focal market chains. At the same time the other elements of the supply chain need to be reviewed including input supply, financing, logistics and packaging. Once again training and support needs are identified.
3. Review cluster membership and structures. This involves assessing commitment of existing members, recruiting new members and perhaps splitting the cluster to create additional clusters. This is also an appropriate time for the group to investigate acquiring a legal status. A mature group will be legally registered and will have appropriate management and control procedures in place.
4. Assess information, training and support needs and conduct trainings and capacity building activities to meet these needs. The donor agency will have an important role here because of their familiarity with the knowledge and skills required to enhance member and leader capacities and their links to other training organisations.
5. Formulate cluster and operational plans.
6. Conduct and review marketing activities.

One issue that has been identified for some institutional markets is that clusters have to combine their product so they are able to supply the volume and variety of products required. Clusters in the Davao region have established a federation to supply one of these markets. Currently, they have a comparative advantage over other suppliers to this market and are receiving higher prices for their product. However, the issue for the future is how to structure and fund this arrangement. The current model of clusters with 15 or less members minimises the problems with trust in the cluster, but combining clusters creates a much larger group with members from different areas and will potentially create jealousies and a lack of trust unless transparency is maintained. These larger groups 'are likely to have governance and cooperation problems ... [because their] ... members are smallholder farmers who lack the literacy, numeracy and management skills to govern a complex organisation' (Murray-Prior, 2008, p. 17). The other issue is how to fund this structure. Since the small clusters do not buy the product and collect relatively small service fees from their members, corrupt practices are less likely to arise and become a problem. However, the marketing

managers for the combined cluster federation will have a greater opportunity and incentive to be involved in corrupt practices, which if they occur, will probably lead to the collapse of the arrangement. Further investigation of this issue is required.

### **Phase 3: Implementing an Exit Strategy**

Sustainability of cluster marketing arrangements is problematic as in the past many such groups have failed when the donor agency withdraws. Some contributors to this problem include: donor agencies taking control of marketing and hence replacing the middleman; donor agencies providing too many gifts and creating a 'handout mentality'; competition between donor agencies; donor agencies focussing on 'favourite' groups who have a 'reputation' for success; and a failure of donor agencies to develop exit strategies. Markelova and Mwangi (2010) call for donor agencies to develop viable exit strategies from the onset of their project in order to lessen dependency issues and that capacity building and effective participation are important parts of this process. This has been one reason for the decision to emphasise the Building Resilience and Exit Strategy phases in the revision of the CRS process. The Exit Strategy phase is expected to be implemented in years 4 or 5.

The CRS clustering process already includes a number of criteria for assessing cluster maturity, so the focus here is on how these can be incorporated into a process for implementing an exit strategy for the donor agency. These criteria are summarised in a matrix on page 140 of CRS-Philippines (2007), with maturity indicators for: organisational development, market position, supply capacity, business management capacity and financial resources. Minor refinements could be made to these indicators but are not discussed here. Similarly levels of performance required to proceed to graduation have been identified, but are also too lengthy to report here. The normal activities of the cluster marketing group outlined previously would continue, but would be augmented by specific steps for this phase which could include:

1. Workshop to assess maturity for graduation or exit of the donor agency. This would involve the farmers in rating their group on the maturity indicators and comparing and discussing their ratings with the donor agency team. Initially it is expected that the groups would not achieve high enough levels to graduate and the workshop would be used to identify strengths and areas for improvements along with planning for how these might be overcome.
2. Training in business planning and development of business plan. Each cluster or association of clusters would be expected to develop its own business plan as part of the exit strategy. Training in business planning would be the beginning of this process which would be facilitated by the donor agency.
3. Strengthen links with supporting institutions. While the donor agency should exit from its intensive support role, any farmer group will still need support or links with research and extension agencies, training agencies, microfinance institutions and markets. Similarly, formal and informal links with other clusters will be beneficial and should be encouraged. This is also an appropriate time to discuss the exit strategies with other donor and development agencies in the area, with a particular focus on not creating a dependency (as suggested by Markelova and Mwangi, 2010), but still providing an opportunity for capacity building in other areas, e.g. Landcare.
4. Group formulates business plan for their afterlife.
5. Participatory evaluation of the clustering process, their involvement in the process and the donor agency performance. Preferably this would be facilitated by an independent agency so that the results would be less biased and the donor agency could learn more from the experience.
6. Organise a graduation activity. This activity would signify the completion of the project and provide acknowledgement of the cluster groups achievements.

It should be made clear to the farmers from the beginning of the establishment phase that the donor agency will be providing support for a finite amount of time and that the cluster marketing group will need to build its resilience and become self sustaining.



## Conclusions

Many donor agency development activities fail because they do not focus on an exit strategy from the initial planning stages. The CRS 8-step clustering process is expanded to three phases: Establishment, Building resilience, and Implementing an exit strategy so that the focus will be on the cluster marketing group becoming self sustaining. The process also needs to address access to finance from the formal lending sector, but this must be handled with care as it can increase risks for farmers and the donor agency must ensure that farmers do not get the perception that the loans are a gift. Building long-term relationships between cluster marketing groups and institutional buyers in the Philippines is a difficult process. A donor agency will have to invest considerable time and effort in facilitating this process and organising activities that build capacity and relationships between the smallholder farmers and institutional buyers, so that the cluster can undertake these activities after the donor agency exits.

## Acknowledgements

This work is supported by funding by the Australian Centre for International Agricultural Research through Component 4, 'Analysis of selected value chains in the southern Philippines' of project Hort – 2007 – 066. Thanks are also due to the local government agencies, private businesses and NGOs in each of the localities who have assisted out project.

## References

- [1] Axalan, J.T., Israel, F.T., Concepcion, S.B., Batt, P.J., Murray-Prior, R. & Loma, L. (2010). Socio-economic impact of cluster marketing: The case of Ned Landcare Association Sweet Pepper Cluster. *Acta Horticulturae*, [in press]
- [2] Campaigne, J. & Rausch, T. (2010). Bundling development services with agricultural finance: The experience of DrumNet. Brief 14. in Kloppinger-Todd, R., & Sharma, M. (Eds.). (2010). *Innovations in rural and agriculture finance*. Focus 18. Washington, DC, USA: International Food Policy Research Institute.
- [3] Cohen, M. (2010). Financial literacy. Brief 2. in Kloppinger-Todd, R., & Sharma, M. (Eds.). (2010). *Innovations in rural and agriculture finance*. Washington, DC, USA: International Food Policy Research Institute.
- [4] CRS-Philippines (2007). The clustering approach to agroenterprise development for small farmers: The CRS-Philippines experience - A guidebook for facilitators.' (Catholic Relief Services – USCCB, Philippine Program: Davao, Philippines)
- [5] Hermes, N., & Lensink, R. (2007). The empirics of microfinance: What do we know? *Economic Journal*, 117(517), F1-F10.
- [6] Jensen, H., Guilaran, L., Jaranilla, R. and Garingalao, G. 2006. Nature Farming Manual. Retrieved on January 27, 2010 from <http://www.scribd.com/doc/15766334/Natural-Farming-With-Organic-and-Biological-Technology-With-HOC>
- [7] Kaganzi, E., Ferris, S., Barham, J., Abenakyo, A., Sanginga, P., & Njuki, J. (2009). Sustaining linkages to high value markets through collective action in Uganda. *Food Policy*, 34(1), 23-30.
- [8] Llanto, G. M. (2007). Overcoming obstacles to agricultural microfinance: Looking at broader issues. *Asian Journal of Agriculture and Development*, 4(2), 23-39.
- [9] Markelova, H., & Mwangi, E. (2010). Collective action for smallholder market access: Evidence and implications for Africa. *Review of Policy Research*, 27(5), 621-640.
- [10] Montiflor, M. O., Batt, P. J., & Murray-Prior, R. (2008). Cluster farms in Mindanao: Are smallholder farmers' expectations being fulfilled? *Banwa Management*, 8(2), 39-54.
- [11] Murray-Prior, R. (2007). The role of grower collaborative marketing groups in developing countries. *Stewart Postharvest Review*, 3(6), 17: 1-10.
- [12] Murray-Prior, R. (2008). Are farmers in transitional economies likely to benefit from forming collaborative marketing groups? *Banwa Management*, 8(2), 10-21.
- [13] Real, R.R., Hualda, L.A.T., Apará, D.I., & Concepcion, S.B. 2010. Microfinance as the key factor affecting

farmers' investment decision-making: Cluster experiences in Impasugong, Bukidnon, Philippines. *Acta Horticulturae* [in press]

[14] Robinson, M. S. (2001). *The microfinance revolution: sustainable finance for the poor: lessons from Indonesia, the emerging industry*. Washington, D.C.: World Bank.

[15] Shigetomi, S. (2006). Organizational capability of local societies in rural development: A comparative study of microfinance organizations in Thailand and the Philippines. The Institute of Developing Economies, Chiba, Japan, Discussion Paper No. 47. [http://www.ide.go.jp/English/Publish/Dp/pdf/047\\_shigetomi.pdf](http://www.ide.go.jp/English/Publish/Dp/pdf/047_shigetomi.pdf). Retrieved 23 January 2008.