MARKETING AND TRANSPORT

9. Horticultural marketing in Zimbabwe: problems met by smallholders and experience of the Mashonaland East Fruit and Vegetable Project in addressing these ................................................................. 65
   M. I. Sena

10. The cost and role of transport in smallholder horticultural production: experiences from the Mashonaland East Fruit and Vegetable Project .......... 78
    C. Karimanzira and A. Jaure

11. Marketing systems for smallholders: A comparison of assembly markets in areas of production with farmer marketing at Mbare Musika in Harare ........................................................................................................ 91
    A. Jaure

12. Competitive marketing strategies for smallholder horticultural produce growers in Greater Harare ............................................................... 104
    M. L. Matanda and T. Mutaviri

13. Horticultural crop production and marketing among smallholders in Zimbabwe .................................................................................. 122
    N. E. Horn

14. Characteristics of four rural horticultural markets in the south-eastern lowveld of Zimbabwe ................................................................. 142
    E. P. Mazhangara, E. Manzungu and M. W. Brown

15. An analysis of the cabbage, onion, potato and tomato market structure in Arumeru district of Tanzania ..................................................... 151
    E. E. Figueroa and D. A. Nyange

16. Evolution of Kenya’s smallholder French bean production ......................... 161
    L. Kimenye

Discussion on marketing and transport ................................................................. 170

SOCIOCOLGICAL AND GENDER ISSUES

17. Socio-cultural issues affecting women horticulturalists in Macheke Resettlement Scheme and Mudzi and Mutoko Districts ....................... 177
    C. M. Manyame

18. Sociological and gender issues in smallholder horticulture: The division of labour and horticulture in relation to household welfare and nutrition ................................................................. 186
    T. Shava

19. Women in home gardening ........................................................................ 190
    T. A. Mtaita

INTERDISCIPLINARY DISCUSSION AND SUMMARY OF CONSTRAINTS ON SMALLHOLDER HORTICULTURE

20. Interdisciplinary discussion on needs for research, extension, education and infrastructural support development ........................................ 199

21. Summary of constraints on smallholder horticulture ................................ 206
HORTICULTURAL MARKETING IN ZIMBABWE: PROBLEMS MET BY SMALLHOLDERS AND EXPERIENCE OF THE MASHONALAND EAST FRUIT AND VEGETABLE PROJECT IN ADDRESSING THESE

M. Sena
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ABSTRACT

Communal area farmers, although traditional producers of horticultural crops, have failed to participate in the recent boom in horticulture. The horticultural marketing structure in Zimbabwe can be classified into two sectors, a formal sector with an emphasis on quality and grading standards which is market-driven, supplying supermarkets, hotels etc. and an informal sector which is product-driven and markets through the city municipal market, Mbare Musika and then through hawkers and vendors. The export market is effectively a new extension of the formal market and communal farmers who traditionally used the informal marketing chain therefore failed to gain access.

The Mashonaland East Fruit and Vegetable project has provided infrastructure and technical support which has allowed small-scale (communal area) farmers entry into the formal marketing systems. The success attained so far is discussed and possibilities of small-scale farmers now growing crops for export considered.

INTRODUCTION

For as long as the poor infrastructure, in terms of poor communications, poorly maintained roads, and lack of cold stores, poor access to information, a poor financial position and the product driven supply attitude of some communal farmers exist in communal horticulture, the smallholder (communal area) farmer will remain marginalised in the booming horticultural industry. The marketing activities of the communal farmers of produce will remain informal and little or no development of the communal areas will happen. Rural incomes will remain very low.

The Mashonaland East Fruit and Vegetable Programme (MFVP) was initiated to help smallholder farmers in communal areas in which horticultural production was traditional and well developed to improve their production and marketing of fresh produce. Project implementation started in 1987. The aim of the present paper is to outline the background to the project in terms of the marketing of Zimbabwean fresh fruit and vegetables and to provide an overview of the project and its operation as a prelude to the more specialized and detailed papers of Jaure and Karimanzira and Jaure later in these proceedings.
There is a clear distinction between the crops grown for the export and local markets (Table 1).

**Table 1: Crops grown for the different markets.**

<table>
<thead>
<tr>
<th>Export crops</th>
<th>Local market crops</th>
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<tbody>
<tr>
<td>fine vegetables</td>
<td>leaf vegetables</td>
</tr>
<tr>
<td>citrus</td>
<td>mushrooms</td>
</tr>
<tr>
<td>deciduous fruits</td>
<td>bananas</td>
</tr>
<tr>
<td>sub-tropicals</td>
<td>squashes</td>
</tr>
<tr>
<td>cut flowers</td>
<td>stringy mango</td>
</tr>
<tr>
<td>ornamentals</td>
<td>avocado</td>
</tr>
<tr>
<td>tree nuts</td>
<td></td>
</tr>
<tr>
<td>stringless mangoes</td>
<td></td>
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<tr>
<td>essential oils</td>
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</tbody>
</table>

There is very little data on local demand for horticultural trade whilst summaries of export figures are supplied. Until recently most local marketing has been on an informal basis with very little publicity given to this market. It was estimated that $75 million worth of horticulture trade may be happening on domestic markets. The value of exports has been put at Z$360M for 1993/94 (Horticultural Promotion Council).

Both the local and export markets are fiercely competitive with activities at Mbare Musika (Zimbabwe's biggest open auction market) reflecting the supply/demand position for each day. The horticultural market has been described by one wholesaler as the second most active market after the stock market.

Prices are controlled entirely by supply and demand and since the drought years of 1991/92 prices have been on the increase. Today prices have been hiked by the worst frost ever recorded, in July 1994, destroying the winter crops.

Export production, currently at 1% of total Zimbabwe export earnings, has been developing fast (Fig 2) with a lot of investment by commercial farmers in new technologies for flowers, citrus and fine vegetables while the local market had developed but at a slower rate. Despite this rapid development in export markets, no communal farmer has really been involved in export production.

Trials by export companies with communal farmers in Mutoko, Murewa, Musana and some irrigation schemes have yielded good production results but quality has deteriorated during the distribution chain because of poor infrastructure. As a result some trials, e.g. sweetcorn in Mutoko, have been temporarily shelved.

On the local markets one wholesaler said of the total tonnage they handled only 5-7% is produce from the communal farmers and over 80% is from commercial farmers.

**Local demand**

Since independence, the Zimbabwean consumer has become a lot more discerning with the middle class becoming a bigger and more important socio-economic group. Tastes and demand are changing fast and putting a lot of pressure on the producer to change cropping patterns year by year. The housewife is changing eating habits from the conventional fresh greens (rape/covo or spinach and green beans) to a diet with a
HORTICULTURAL MARKETING IN ZIMBABWE

The marketing system
Basically, 2 markets exist for fresh fruit and vegetables:
(1) the local market
(2) the export market.

The local market can further be divided as follows:
(a) formal
(b) informal. Alternatively the market can be divided into the formal and informal sectors with the export market being part of the formal sector.

The formal sector has an emphasis on quality and is market driven. The informal sector has the emphasis on quantity and is product driven. Figure 1 shows the linkages in the different market segments.

Figure 1: Market channels for fruit and vegetables in Harare

![Diagram showing market channels for fruit and vegetables in Harare](image-url)
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Figure 2: Horticultural exports 1985/86 to 1993/94

Source: Horticulture Promotion Council
It is not surprising to note that the TM supermarket in Chitungwiza (a new town in Zimbabwe with a virtually all African population) is about the largest outlet for babymarrow (once consumed only by whites).

The consumer/housewife has now been exposed to good quality produce from South Africa and pressurises local farmers to adopt technologies that will produce those qualities, especially for apples and table grapes. Because of increased imports, off-season production may soon become history especially for fruits like apples which can be stored for long periods and can be easily imported into Zimbabwe at very competitive prices.

Those farmers in a position to adopt new technologies and produce according to consumer demand, have already began to enjoy the fruits of their work while those farmers with little choice over production pattern, continue to suffer. They have survived by sheer luck. It is the smallholder who has poor information about the market and is in a poor financial position to take advantage of any lucrative opportunity who has become a victim.

**Farmer attitudes**

In some cases small-scale farmers have been helped with necessary resources but continue to perform poorly because of attitude problems and the fact that old habits die hard. The way they continue to present their produce at least cost is an indication that the farmer does not easily change certain practices. They do not trust new ideas and are very suspicious of new concepts. Most of them lack the basic education that enables them to understand information that trickles to them. They would rather continue with their old wise methods of conducting business. In this they are quite rational in behaviour given the environment they operate in.

**INFRASTRUCTURE AND TECHNICAL ASPECTS OF PRODUCTION AND HANDLING**

Poor infrastructure adversely affects the quality of produce which has been properly grown and looks good in the field but down grades to very poor grades by the time it reaches the market because of poor roads and poor post-harvest handling techniques.

**Roads and transport**

Besides being poorly maintained, the gravel roads tend to be very long and winding. Some roads are so poorly maintained and inaccessible that some farmers hardly get any trucks near to their homesteads. A lot have to cart their produce +/-20 km to the main roads where they can get buses and trucks to carry produce to the market. The long journeys on the poorly maintained roads cause bruising of produce during transit.

Many a time, in order to beat the transport problems the farmer prematurely harvests his produce just to take advantage of any truck coming through his way. Other farmers leave produce to overripen in the field because no transport has been available. The result is poor quality of produce which is not acceptable by supermarkets and wholesalers. The farmer then resorts to dumping his produce at the Mbare Musika market and accepts whatever price comes his way.

The other problem is that the trucks and buses only take farmers to the city main roads so they end up getting produce which can be sold at a very low price.
The AFC now only lends to groups of farmers and farmers not part of a group will not receive any form of financial assistance. The AFC has in the past failed to recover moneys lent to the communal farmers because uncontrollable factors like drought adversely affected their harvests and hence incomes.

**Harvesting techniques**

Farmers might be aware of good methods of harvesting but because of shortage of labour and no financial resources to pay hired labour they use shortcut methods of harvesting. Trees are shaken and fruits are allowed to drop on bare ground causing cuts and bruises on the fruit. Quality deteriorates and the process of rot sets in. Shaking also causes immature fruits to fall causing losses in yield.

**Post-harvest handling techniques**

Because production is scattered over thousands of farmers each farmer handles produce in the manner he has understood over years of experience. There is general lack of knowledge of proper harvesting techniques, of times to harvest and techniques to store produce whilst awaiting transport. More often than not produce is left by the roadside in the open heat while awaiting transport.

**Coldroom facilities**

To maintain quality of produce and long shelf life, it is necessary that, after harvesting, the produce be stored in cold rooms to remove field heat. This infrastructure has not been available because of the inhibiting cost and lack of power. Only through the Mashonaland East Fruit and Vegetable project have such facilities been made available.

**THE MASHONALAND EAST FRUIT AND VEGETABLE PROJECT — A CASE STUDY**

**Background**

The Mashonaland East Fruit and Vegetable Programme (MFVP) is managed by the Agricultural and Rural Development Authority (ARDA) and sponsored by the European Economic Community (EEC) which is now more generally referred to as the European Community (EC). The project aims to assist smallholder horticultural producers in Mutoko, Uzumba, Murewa, Seke and Chinamhora communal areas by the improvement of production and marketing techniques of fresh produce. The project implementation started in October 1987. To date the project has only covered two areas, i.e. Mutoko and Uzumba and is scheduled to move into the remaining three areas during 1994/95 financial year (Figure 3).

Since the programme started in 1987 the project has provided three eight-tonne trucks to the newly formed Uzumba and Mutoko Horticultural producers Associations and has been transporting around 4000 tonnes of produce annually to the market. Based on an ADA survey in 1988, it is estimated that 61% of the communal farmers in Mutoko use lorries to transport their produce to the market, 33% use buses and 6% use private vans: 40% of those using trucks use the project trucks.

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the customer (wholesaler, hotel etc). Because the farmer neither has the time nor the money to do that he makes Mbare his final stop and accepts whatever price is offered.

Once the farmer repeatedly suffers losses because of failure to get his produce to the market in time he gives up and switches over to field crops with fewer marketing and storage problems.

Communications
Besides the poor roads and transport shortages, the communal areas have no telephones and radios. Communication is through extension officers from AGRITEX who are limited in number. These officers only operate for half the year because their budget is small. This means that for the other half of the year farmers work on their own with no supervision.

Today’s horticultural business is conducted by telephone where the buyers order by telephone and negotiate prices on the phone for specific grades of produce. Produce is described by grades in the formal market and this has presented problems to the communal farmers who are accustomed to informal grades which are different from formal ones, e.g. for tomato, the formal grade A grade tomato is a medium sized green to orange tomato (round with no blemishes) while on the informal market the first grade tomato is a large red and firm tomato. Therefore when the communal farmer tries to operate in the formal sector he gets confused about the grading criteria and usually feels cheated when what he considered first grade is down graded to second grade.

One wholesale company has compiled what they call a growers’ profile and they only deal with those farmers who fit into that profile on a regular basis. The profile includes the water resources available to the farmer, their financial position, availability of the telephone and transport and acreage available. It is clear that communal farmers do not fit in this profile. It means that their dealings with this particular wholesaler will remain informal.

Access to information
Information on new technologies, new seed varieties and market prices has been available but not in the form or media that its accessible by the communal farmers. Price bulletins come out in the Herald newspaper and the Farmer’s Weekly which are available in towns. By the time this information reaches the communal farmers it is already out of date.

New varieties of seed come out but are not available in the local shops. They are also usually quite expensive. The communal farmers resort to their own home prepared seed, the variety remaining unknown until the time of fruiting.

Access to financial resources
Communal farmers usually have low incomes which are not sufficient to buy seed, hire labour and install irrigation schemes. They cannot borrow from the banks because banks insist on collateral and the nature of the business is so risky that no financial institution is prepared to lend money to individual communal farmers.

The Agricultural Finance Corporation (AFC), which is a parastatal, has now changed its strategy of dealing with communal farmers. In the past individuals could just go and borrow money for inputs they required and even for installing irrigation.
The AFC now only lends to groups of farmers and farmers not part of a group will not receive any form of financial assistance. The AFC has in the past failed to recover moneys lent to the communal farmers because uncontrollable factors like drought adversely affected their harvests and hence incomes.

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Figure 3: Mashonaland East Fruit and Vegetable Project
that way the association provided a stronger body to bargain for better prices, venture into supply contracts and organize and manage the collection and distribution of produce at reasonable rates.

**Transport**

After the programme provided the initial 3 trucks the two associations generated further income from the trucks and purchased a further 4 trucks and trailers.

This has helped ease the transport problems but transport blues still exist. The loops covered by each truck are still too long e.g. in Mutoko one route is as long as 84 km on gravel and then has the 156 km journey to Harare. As a result a truck can only do 3 trips a week, allowing 1 day for servicing. Truck break downs and sometimes accidents cause some of the trucks to be grounded.

**Production**

The project has a small extension team of 10 who assist and advise farmers with respect to top-working of fruit trees, budding and grafting, production, good cultural practices and produce collection and grading. They also help the farmer acquire the necessary inputs and seed varieties.

**Infrastructure**

The project has set up 14 produce collection points in all the wards in the district. The sites of these collection points have been carefully chosen to service the most remote parts of the communal areas. The collection points have big sheds with two storerooms each where farmers easily cart their produce and leave it in the shade for collection by trucks to take it to the grading sheds at Mutoko and Murewa centres. Produce does not have to lie in the open heat any more. At these sheds the farmers can purchase fertilizers, seed and chemicals and get advice from the extension officers and also get information about the day’s prices in the market and what is in demand.

From the collection points, produce is then transported by the association trucks to Mutoko and Murewa assembly markets where grading of produce take place. Produce is also cooled and field heat removed. Once graded each individual farmers’ produce is identified and the tagged (labelled) produce is then sent to Harare to the marketing team for distribution to various customers. Usually delivery to Harare is done at night to avoid the heat of the day and to make sure that the produce is at the market by dawn.

At these assembly markets there are also office blocks equipped with electricity, water, telephone and radios for communication

**Marketing channels**

The project provides two marketing channels. The first is the informal one where the project provides transport to Mbare market and the individual farmer follows after his produce to do his own selling. The farmer does all his grading and packing on his field and just waits to be taken to the market.

The second marketing channel is in the formal sector. Grading and classification of produce enables the marketing team to penetrate a wider range of markets and break the farmers’ old habits of channelling all produce to Mbare. The second marketing channel involves the collection and bulking of produce at the assembly markets, grading
and repacking before being passed on to the Harare marketing team. The team handles marketing and distribution on behalf of the farmer and at the end of the day relays prices back to the assembly markets by telephone or radio.

When trucks are not immediately available, the produce is temporarily stored in the coldrooms at these centres.

The main target markets for graded produce are the supermarkets, green grocers, restaurants and wholesalers, i.e. basically all formal markets. The poor grades still find their way to Mbare Musika market. Our list of clients has been expanding from the biggest supermarket chains and schools down to the suburban shops. The big wholesalers have been our clients too.

The project aims to handle up to 80 tons per month through the grading operations and up to 600 tons per month through the direct farmer marketing.

However, after two years of operation the project has been grading not more than 20 tons of produce per month, far less than targeted. There has been slow absorption of the grading operations with only a few farmers actively involved.

The reasons are many and include:
1. Farmer resistance to new ideas; old habits die hard
2. Farmer suspicions and lack of trust of third parties in the marketing chain.
3. Poor basic understanding because of limited education e.g. confusion over grading criteria.
4. The 1991/92 drought which has greatly affected yield. The Mbare price is apparently higher than assembly market prices in drought periods.
5. The farmers require immediate cash payment for their produce and the assembly markets which grade the produce only pay after two days.

The project staff is working hard in trying to persuade farmers to utilise the grading operations. It takes time but positive results are already showing.

Aspects of the marketing mix

Product
From the long list of horticultural crops both for the local and export market, it has been proven that with proper supervision and organisation and necessary resources communal farmers can grow a wide variety of crops very well, especially labour intensive ones like beans, mange tout, babymarrow and tomato. They have proved that they can grow for export speciality crops like sweet corn and evening primrose. At Mutoko sweetcorn trials were initiated by a produce export company with a few selected farmers but poor infrastructure rendered the project unviable. Today, now that the MFVP project has put into place coldroom facilitates at Mutoko it is possible that the same company will resume the trials. Today they are concentrating on evening primrose which has fewer post-harvest problems.

In Murewa a big wholesaler has identified a group of communal farmers who grow babymarrow, squashes and cucumber for them, while in Bindura an export company is working with smallholder farmers on mange tout trials for export. In Musana a similar project was affected by drought.

It is clear that groups of farmers are favoured by big companies because they are in a better position to deliver goods than individual farmers. The big companies can form the necessary linkages to develop communal farmers into successful commercial agriculturalists.
Initially the MFVP product portfolio was limited to tomato, cucumber, green onion, the stringy mango varieties and guava. Today the tomato remains the biggest crop grown accounting for about 40% of the total tonnage transported with the stringy mango at 35%. The project has however introduced a variety of other crops and fruit trees like stringless mango, citrus trees, avocados, babymarrows, squashes and a variety of peppers. At the moment the quantities delivered are still negligible but the fact is that the communal farmers are diversifying their crops to spread the risk of poor prices. The drought of 1991/92 did not help the situation. The newly established orchards were badly affected.

The few farmers with available water all year round are practising production programming and trying to plant early and be on the market first to take advantage of high prices in the beginning of the season.

The MFVP has employed a horticulturalist to help with the production programmes and to assist farmers to acquire the right varieties of seed.

**Grading and quality**

The definition of good quality has remained a problem as already mentioned above. Formal sector grades are different from the grades to which the farmers are accustomed, causing confusion and suspicions.

Grading facilities set up in Mutoko were to separate the different qualities and target these to a variety of customers. Mbare grades would still find their way to Mbare while better qualities would be distributed to other clients. This, it was hoped would lessen the risk of getting lower prices at Mbare and would take advantage of good prices elsewhere.

**Price**

Grading has enabled the marketing team to reach a wider range of customers. In general all things being equal the prices obtained for farmers after produce has been graded have been consistently higher per kg than the price of ungraded produce. However, it is also true that at Mbare when tomatoes are in short supply prices can go as high as $4.00/kg while in the formal market producer prices for A grade tomato rarely exceed $3.00/kg! An example of the effect of shortage of produce is given by contrasting a “normal” year with a drought year.

Prices and costs in a “normal” year

(i) Scenario a: The farmer comes to do his own marketing Mbare Market: ungraded produce.

100 crates of 13 kg tomatoes will sell as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30 at $10.00</td>
<td>$300.00</td>
<td></td>
</tr>
<tr>
<td>40 at $8.00</td>
<td>$320.00</td>
<td></td>
</tr>
<tr>
<td>30 at $5.00</td>
<td>$150.00</td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td>$770.00</td>
<td></td>
</tr>
</tbody>
</table>

Less Farmer Marketing Expenses

<table>
<thead>
<tr>
<th>Product</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport @ $2.00/crate</td>
<td>$200.00</td>
</tr>
<tr>
<td>Return fares to Harare</td>
<td>$30.00</td>
</tr>
<tr>
<td>Stand fees</td>
<td>$6.00</td>
</tr>
<tr>
<td>Food</td>
<td>$10.00</td>
</tr>
<tr>
<td>Total expenses</td>
<td>$246.00</td>
</tr>
<tr>
<td>Net revenue</td>
<td>$524.00</td>
</tr>
</tbody>
</table>
Marketing expenses can be higher than that if it takes the farmer more than one day to sell off his produce. Stand fees double, food and accommodation become additional expenses.

(ii) Scenario b: When the project markets on behalf of the farmer: Graded produce. 100 crates of 13 kg each will give 1300 kg total weight of produce as follows:

- 60% as grade A and B = 780 kg or 78 crates of 10 kg weight
- 40% as grade C or Mbarc = 520 kg or 40 crates of 13 kg weight

These crates will be sold as follows:

- 20 as A grade at $12.00 = $240.00
- 58 as B grade at $10.00 = $580.00
- 40 as C grade at $5.00 = $200.00

Total revenue = $1020.00

Less marketing expenses:
- Transport at $2.00/crate = $236.00
- Grading/handling at $0.40/crate = $47.20
- Stand fee = $6.00
- Crate fee at $0.20/crate = $23.60

Total expenses = $312.80

Net Revenue = $707.20

Even when a proposed marketing commission 2–3% is charged, the farmer is still better off by having the distribution done on his behalf. During normal years when supply is good the advantages of grading are obvious. Besides the price advantage, definitely more crates are realised from the initial 13 kg crates.

Grading has the further advantage of using the Mbarc outlet for lower grades and enables marketing to venture into new markets with better grades.

Prices and costs in a drought year

(i) Scenario (a) The farmer does his own marketing Mbarc sales of 100 crates of tomatoes by the farmer

- 30 at $25.00 = $750.00
- 40 at $16.00 = $640.00
- 30 at $14.00 = $420.00

Total revenue = $1810.00

Less costs $235.00

Net revenue $1575.00

(ii) Scenario (b) The project markets for the farmer

- 20 as A grade at $22.00 = $440.00
- 58 as B grade at $14.00 = $812.00
- 40 as C grade at $14.00 = $560.00

Total revenue $1812.00

Less costs $312.80

Net revenue $1500.00

During the drought period and short supply periods it is true that Mbarc becomes a better outlet offering higher prices. It then makes better sense to channel all grades to...
Mbare and forget about grading! This brings the already mentioned confusion with farmers over the credibility of other outlets.

**Packaging and promotion**

Most farmers use the wooden crates and big grain bags as containers to take produce to the market. Most of these crates are poorly designed in order to avoid costs. They are unattractive and so roughly finished that they cause bruising of produce in transit. The grain bags are piled on top of each other and do not provide the protection needed for the produce. There is no doubt that produce poorly presented like this will not be acceptable in the formal market and where it does it fetches lower prices. The big bags also look less hygienic.

To address this situation the MFVP has purchased 2000 properly designed wooden crates and the ARDA Mutoko Logo has been neatly painted on them. The project charges $0.30 for use of these crates by the farmer. This has enabled individual farmer produce to be marketed as one under the ARDA logo.

The project also acquires for the farmer at cost suitable pockets for the other vegetables and fruits.

The project is also going to purchase the new light weight and attractive plastic crates for use by the farmers. These are more durable and wash easily. They also present fewer problems in the wet season.

The project is also looking at prepacking and punneting for the supermarkets and to make more efficient use of the space and labour available at assembly markets. The infrastructure is available at these assembly markets.

**CONCLUSION**

Provided the necessary infrastructure is put into place and the communal farmers get themselves organised into functional groups they can easily be coopted into commercial horticulture. The big wholesalers and supermarkets have been willing to form linkages with them but claim that the farmers' attitude towards business leaves a lot to be desired. They remain product oriented and are price rigid and want to continue operating on a cash basis.

The AFC is also willing to provide the financial resources to farmer groups.

The MFVP has tried to show that the communal farmers can also play an important role in commercial horticulture and they are as vulnerable to market demands as their counter parts. The project has tried to address the marketing problems faced by the communal farmers by providing infrastructure, transport and extension and a horticultural expert to the farmers.

However, the success of this project will depend on how fast the farmers will adopt the marketing concept and start directing all their produce for grading and marketing. The opening of more and new outlets will be determined by consistent supply of quality produce by the farmers. At the present moment the communal farmers speculate with their produce and have not been working towards building a permanent relationship with their clients.