# Draft Walking the Goroka/Port Moresby Floricultural Value Chain in Papua New Guinea

Trip Report to
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Agricultural Research
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## **Executive Summary**

This report is organized into two parts. The first part documents the process and early outcomes of walking the Goroka/Port Moresby (POM) floricultural value chain by two Goroka representative growers from the Eastern Highlands Province facilitated by the ACIAR project team members. There are two main purposes for walking the Goroka/POM floricultural chain. Firstly, the activity is for growers to have first hand market information and a deeper understanding of market requirements. Secondly, it is for growers to establish supply contacts with the POM florist buyer network.

There are only two major grower groups in Eastern Highlands, the Eastern Highlands Province Women in Agriculture, and the Goroka District Floricultural Group. Due to budget constraints, one grower from each of the two major floricultural groups was recommended by the local ACIAR team after consultation with the leaders of the two groups. The team visited five florists in POM, who offered comments on the sample cut flowers and foliage that the growers showed them. Comments included quantity and quality specifications, rough indications of buying prices, and levels of demand for different products in the POM market. After walking the value chain, the representative growers were made aware of some issues at the grower level, such as harvest time, preferred flowers to grow for the POM market. Two weeks after walking the Goroka/POM floricultural value chain, the local project team contacted Goroka growers and some POM florists, there was some indication of early positive outcomes from walking the value chain, which is documented in Postscript.

The second part of this report consists of some observations from walking the value chain activity and from discussions with team participants. One consistent observation in the PNG floricultural value chain is that growers are the weakest link in the chain in the context of growing techniques, access to information and knowledge, and business skills. Training at the grower level on all aspects of modern supply chain management, including growing, postharvest handling, quality standards, communication and business skills are needed for growers to offer value in the Goroka/POM value chain. Only when growers are skilled, will florists be ready to partner with them and build trustworthy commercial relationship. One highlight among the recommendations is for Goroka growers to consider establishing a cooperative. The prospect of setting up a cross-group co-operative in Goroka is positively embraced by the representative growers who walked the Goroka/POM value chain. The benefits for a Goroka floricultural co-op are likely to include joint purchasing of farm inputs, profit sharing incentives, access to floristry accessories from POM, bulking up of quantity, centralised grading and packaging, improved logistical co-ordination for sending products to POM, and access to training workshops by qualified floricultural professionals.

# **Acronyms**

Australian Centre for International Agricultural Research
Australian Agency for International Development
Eastern Highlands Province Women in Agriculture
Forestry Research Institute
The kina is the currency of Papua New Guinea (PGK). It is divided into 100
toea. 1Kina is about 0.5 Australian Dollar
National Agricultural Research Institute
Papua New Guinea
Port Moresby
Toea, PNG currency, 100t = 1Kina
Women in Agriculture

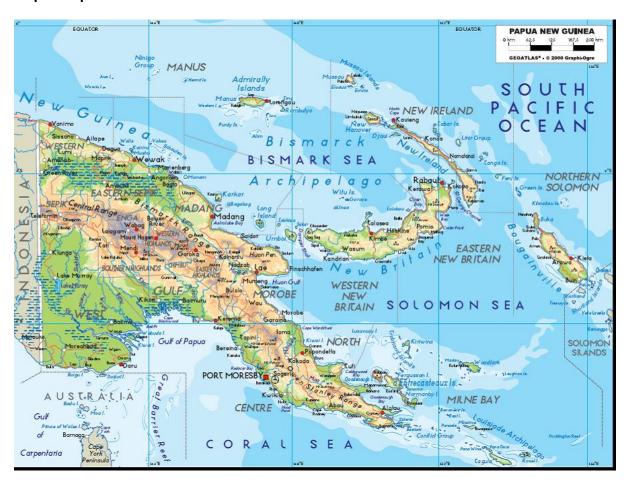
# Map of Papua New Guinea



Source: Wikipedia

http://en.wikipedia.org/wiki/Papua\_new\_guinea

# Map of Papua New Guinea



Source:http://www.google.com.au/imgres?imgurl=http://unstucktravel.com/wp-content/uploads/2011/04/PNG-

Map\_118230550922074.png&imgrefurl=http://unstucktravel.com/2011/04/09/papuanew-guinea-surf-and-

sailing/&h=670&w=895&sz=614&tbnid=A6Os5B8OHzyudM:&tbnh=90&tbnw=120&zoom= 1&usg=\_\_jw9QHqJeF8Nn9VmoAcgPjJ\_44Ag=&docid=W-

UKIr7XOPfW5M&sa=X&ei=DHoQUsTYAa2eiAfZ8oDACw&sqi=2&ved=0CDEQ9QEwAQ&dur=342

#### PART I

## Walking the Goroka/Port Moresby Floricultural Value Chain

# **Background**

This report supplements the previous ACIAR report in 2012, Floricultural Value Chains in Papua New Guinea, where several floricultural values in PNG were outlined. Among them, it was considered that the Goroka/Port Moresby value chain was worthy of further exploration. This report is organised into two parts. The first part documents the process and early outcome of 'walking the floricultural value chain' by two representative Goroka growers of the Eastern Highlands Province facilitated by the ACIAR project team members, Sherrie Wei, Nicholar Boas-Singomat, Peter Homot as well as Sim Sar for part of the Port Moresby(POM) end. This part is documented in a narrative manner for the reader to experience the Goroka/POM floricultural value chain as we did as much as possible. Where appropriate, comments were made. The second part of this report consists of some observations and insights derived from walking the chain exercise as well as valuable from discussions with participants.

There are two main purposes for walking the Goroka/POM floricultural chain, for growers to have first hand market information and a deeper understanding of market requirements, and to establish contacts with potential buyers in POM. The Goroka/POM floricultural value chain was selected to walk through by growers with the project team's facilitation mainly because the altitude and cooler climate of Goroka is favourable for growing subtropical to temperate flowers that are not easy to grow in coastal low land areas, such as Lae and POM. It is thus more reasonable to walk the Goroka/POM chain rather than the Lae/POM chain both of which were reviewed in the previous report in 2012. The participants for walking the Goroka/POM Floricultural Value Chain are:

Sherrie Wei – facilitator from Australia,

Nicholar Boas-Singomat – facilitator from National Agricultural Research Institute (NARI), Lae,

Sim Sar – observer from NARI, Lae,

Peter Homot – participant from FRI, Lae,

Jennifer Kena – Goroka grower representing the Eastern Highlands Province Women in Agriculture (EHPWIA), and

Angela Monave – Goroka grower representing the Goroka District Floricultural Group (GDFG).

There are only two major grower groups in the Eastern Highlands Province, the Eastern Highlands Province Women in Agriculture, and the Goroka District Floricultural Group. Contact details of the growers from each group who attended the project's workshop before walking the value chain activity is listed in Appendix 1.

The Eastern Highlands Province Women in Agriculture Group. The group has many subgroups, each consisting of 20-30 growers. Examples of such small groups are Didimarys Club, Kafonaga Women's Group, Lusaruka Women's Group, WIA Golizauka Floricultural Group, WIA Goroka Floricultural Group, etc. These groups meet regularly to discuss matters related to floricultural and vegetable production and livestock husbandry. Members come to meetings through phone, radio, and personal communications. Each small group is a member of Women in Agriculture (WIA). Membership fee is K100 per small group. Interestingly, Didimarys Club is made of DPI officers' wives, children and relatives. Kafonaga Women's Group is made of about 200 women from the village of Kafonaga where cordylines are widely grown. There is fee of K20 for participating in small groups. Some subgroups send subtropical flowers to POM. Growers take flowers by public motor vehicle (PMV) to sell to a local consolidator in Goroka to be air freighted to POM. Goroka groups seem to work more closely together compared with Lae groups. There is also more crossgroup interaction among Goroka groups. Growers are rather positive about the notion of organising into a co-operative, which point will be revisited later.

Rachel Jubol from the Eastern Highlands Province WIA brought to the Goroka workshop the cut flowers that she grew.



The two-coloured large anthurium was sold for K5/cutting and the white arum lily for 50t/cutting.



Ground orchid, yellow hot potter (local name) was sold for K1/cutting.



Agapanthus was sold for K2/cutting, and Amazon lily for K1/cutting.





Cordylines are widely grown in the Eastern Highlands Province, which have been sent to POM and even tested in the Melbourne market.

**The Goroka District Floricultural Group.** The Goroka District Floricultural Group was established by Maggie Seko in 2012. Maggie has been a government officer for a long time.

Currently, she is Principal Project Officer of the Natural Research Sector under Goroka District Administration. Vote counting during all levels of election is part of her work. In 2013, the group has around 70 members. Maggie Seko is the founder, leader and Coordinator of the group and has conducted trainings to the growers on cutting flowers, dressing, and some on quality standards. Meggie plans to buy products from her group members to sell to POM and for the first Goroka florist shop that she has been hoping to set up for some time.

## Walking the Goroka/Port Moresby Floricultural Value Chain

# **Selection of representative growers**

Due to budget constraints, one grower was recommended from each of the two major floricultural groups, Jennifer Kena, Vice President of the Eastern Highlands Province Women in Agriculture and Angela Monave, Treasurer, the Goroka District Floricultural Group.

#### 1. Jennifer Kena

Jennifer is well known as the 'African yam lady' even among women and officers who haven't met her before. She showed women how to grow and made profits from growing African yam personally and through a CD produced by WIA. Kafonaga has an elevation of over 1,800 metres above sea level. Most households grow orchids, cordylines and ferns just to beautify their garden, yet growing floricultural for commercial purpose is not common in the village. In that CD, she also promoted floriculture to women for its potential for income generation for households. In her village of Kafonaga, Jennifer grows mostly differentiated anthuriums, i.e., larger spathes or non-common pink ones. In addition to selling flowers to the local market, she sends cut flowers now and then to Mary Saun, a wholesaler cum florist in POM. Jennifer often shares her order with other women. She would drive around to collect cut flowers from growers without charging fuel and time to growers when a buyer wanted this part of the hidden cost to be absorbed by her fellow growers. Jennifer expressed that to this date the orders from Mary Saun had been very few depending on whether Mary had standing orders in hand. Jennifer is an advocate for setting up a florist shop in Goroka owned by as many women as possible<sup>1</sup>.

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<sup>&</sup>lt;sup>1</sup>Jennifer had put forward her proposal to key members in her group, Eastern Highlands WIA. However, one key member, Maggie Seko, who had a agricultural related government position, expressed her interest to start up such a florist shop by herself and requested Jennifer on hold of the plan. Later in 2006, Maggie renounced her WIA membership and in 2012, she organised her own group, the Goroka District Floricultural Group. Maggie has not been able to start up the florist shop due to the work load in her government position. At the time of this report, Maggie plans to quit her formal employment with a view to focusing on the floricultural business. At the same time, Jennifer has raised K50,000 from five women and negotiation is underway with a property landlord for a long term lease to start up the first florist shop in Goroka. At time of this report, she plans to quit her formal employment with a view to focusing on the floricultural business. At the same time, Jennifer has raised K50,000 from five women and negotiation is underway with a property landlord for a long term lease to start up the first florist shop in Goroka.

# Box1: Jennifer Kena and Kafonaga Village from the Eastern Highlands Province

Jennifer is of middle age and had only three years of formal education. Her husband is a retired government officer, and they live in the village of Kafonaga, which is about three hours from Goroka. Currently, the village has a population of 1,520 people.

Owing largely to the couple's dedicated volunteer efforts over the past some 10 years, the village stands out as a model village in PNG. The villagers, men and women come together twice a week to do community work, including fixing roads, and plant orchids and cordylines along road sides. To maintain tidiness in the public areas, those who chew betel nuts must be responsible for the litter by carrying a plastic bag with them or burying chewed nut in the ground. Stealing of any kind, like vegetables, flowers, animals, will be fined K50 by the Community Board if persons are caught in the act. The Community Board is non-governmental and has 60 members. Each member belongs to a committee, such as Education, Youth and Health. Matters related to agricultural extension would go to the Education Committee. Different from other villages in PNG, Kafonaga village barely has crime, holes in the road or betel nut stains on streets. Currently, the village has 13 public toilets. When there is a funeral or wedding, which is often costly for the bridegroom's family, each villager contributes K2 to help out. The village has been visited by the Governor and the Adventist Development and Relief Agency (ADRA). In its own right, the village Community Board has been able to get funding from donors.

Jennifer has been thinking and planning strategies on how to improve the livelihoods of villagers. In her ideal, she desires to open a florist shop in Goroka owned by as many women as possible with equal shares. The florist shop will be an independent entity which buys products from women growers to establish reliable local market supply. This arrangement provides the dual opportunities for women to earn income, through selling products to the shop and through sharing profits earned by proper management of the retail shop. There are two more advantages of setting up the shop. It can jointly purchase floricultural accessories, such as oasis, ribbons, boxes and pots, which all come from Port Morseby. The florist shop can also sell products to the Moresby market since the current Goroka/POM floricultural supply chain has many areas for improvement and buyers in POM are not yet satisfied with the supply chain operation. To start up the small enterprise, Jennifer estimated that K100,000 would be needed. This investment may be sourced by private loan under sole ownership, but she prefers the shop be owned jointly and profits shared by as many women as possible.

# 2. Angela Monave

An obvious representative for the Goroka District Floricultural Group to walk through the Goroka/POM floricultural value chain, is Maggie Seko, founder and Co-ordinator of the group. The group was recently formed in 2012 by Maggie. However, she has been unable to focus on floriculture due to her government job responsibilities. Two days before walking the chain activity, she suggested that Angela Monave walk the chain with the project team. Nevertheless, Maggie made an effort to meet with the project team the night before our departure to POM. She expressed the view that she was very interested in setting up the

first florist shop in Goroka and would buy flowers from her member growers to sell at the shop and to POM. Angela grows a variety of cut flowers and cordylines. Angela is also Treasurer of the Goroka District Floricultural Group. She is also the accountant for the Research Conservation Foundation of Goroka, which runs a guesthouse breakfast business mostly for government officers and their visitors.



Maggie Seko (left), Co-ordinator of the Goroka District Floricultural Group, couldn't participate in walking the Goroka/POM floricultural value chain, but visited the project team the night before the activity. She nominated Angela Monave to be the group representative for walking the Goroka/POM value chain.

# **Getting Ready to Walk the Goroka/POM Floricultural Chain**

A workshop was conducted with Goroka growers who were able to attend, where walking the value chain activity was introduced by the facilitators. The night before walking the chain, the two grower representatives were advised to take some samples of cut flowers with them to entice comments from POM florists, or in case they had more, to bring them for test selling. The flowers would be cut early in the morning just before departure. Angela brought an assortment of cut flowers, cordyline leaves and cordyline stem cuttings as planting materials. They were all placed in a carton box, but the project team facilitators assisted to wrap the cut flowers in newspaper to minimise damage during transit. Jennifer didn't bring any sample, perhaps due to the distance between her village and Goroka (three hours from Goroka), but she bought some anthuriums near the airport similar to what she or other women grew in her village. While the team was waiting for boarding, Angela went to get some sachets of sugar and bleach to use once arriving at the hotel to slow down the wilting process of the sample flowers.





Left photo: Eastern
Highlands grower Jennifer
Kena passed through Goroka
airport security starting the
'walking the Goroka/POM'
floricultural chain.
Right photo: Similarly for
Angela Monave.



Two growers (left and middle) seeing off Jennifer at Goroka airport



Sample cut flowers Jennifer bought near the airport. They are similar to flowers grown by women that she knows.



Cut flowers from Angela's garden were placed in a carton, but they are now being wrapped in newspaper to minimise damage.

While there is some excitement in the air, there is also some anxiety among the team members as by then, the team's itinerary has not been firmed up. Local team members self-teased that PNG is known as 'the Land of Unexpected'. We could only hope that it would be unexpected in a positive way!

The team knew that they needed to see some florists and shops in POM like:

- 1. Mary Saun, WIA member, trainer, buyer and florist in POM, president of the POM cut flower association.
- 2. Sally Napolioni, trainer, buyer and florist in POM, owner of Blooming Flowers, a florist shop in Vision City shopping mall, the most up-market mall in POM,
- 3. Josephine Waieng, POM customer of Rose Gendua, grower and florist in Lae, and
- 4. Salome Denber, an irregular POM customer of Rose Gendua in Lae.

The names of Josephine and Salome came up only a couple days before departing for POM during the team's workshop in Lae<sup>2</sup>.

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<sup>&</sup>lt;sup>2</sup> Rose Gendua privately told the Australian facilitator that she sent anthuriums and others to POM. It appeared that few people know she is in the Lae/POM floricultural supply chain. Rose has been doing relatively well in her cross-regional Lae/POM trial supply chain. In addition to her land in 14 miles (meaning 14 miles from down town Lae), she has recently bought a large block of land in Mutzing, an hour west of Lae with slightly cooler weather, where she grows heliconias, anthuriums, and orchids. Upon learning that the team would visit her customers in POM, Rose was apprehensive about the team's meeting with her customers. If the team had known that the Lae/POM cut flower value chain had been present, Rose might have been included as a representative grower to see more of the POM market. Rose was later invited to come to POM to join the team, but she had to finance herself. Rose decided not to come, but asked the project team to bring back some floristry accessories that she would get Josephine to buy for her.

# Meeting with Buyers and Potential Buyers in Port Moresby

#### 1. Mary Saun

Upon arrival at POM around noon, the NARI team facilitator contacted Mary Saun to meet her straight away as the cut flowers and cordylines are now under 30°C ambience environment. Mary did not appear enthusiastic and was very critical about the growers and the quality of cut flower and foliage samples that the team presented. Nevertheless, some of her complaints were valid. For example, some gerberas were harvested too young that the peduncles were not upright. She asked one grower how big her land was. The grower showed with gesture from 'here' to 'there'. Mary reprimanded that she wanted to know the exact measurement with figures like square metres. Most of the time during the encounter with Mary, the two growers were speechless. The Australian facilitator had to cut in to return to the purpose of our trip and probed into her uses, the kind, quantity and quality of her cut flower specifications. In general, her prices to growers were very low although the quantity indicated by her was larger than other florists. For example, Mary anticipated buying K5,000/week of anthuriums for the 2015 South Pacific Games to be held in POM. While Mary said that she wanted a consistent supply of cut flowers and foliage that are of finest quality, one grower commented later that Mary could not be a consistent buyer from experiences. Following Mary's advice, the grower planted anthuriums for her, but Mary bought from Mt Hagen highland growers. It is possible that the grower's products and prices are not competitive enough, yet it is also possible that, sometimes customers try to expand their source of supply to hunt for a lower price.



The representative grower, Jennifer (left) prepared an Indigenous meal, chicken and vegetables (ferns, aipa, etc.) open fired on outside of bamboo stems. The team had the food upon arrival at the POM airport. In the meantime, the NARI team facilitator contacted Mary Saun for a meeting straight away.





Left photo: The team interviewed Mary Saun (right in blue shirt)

Right photo: The box from Angela's garden first opened for Mary's comments.



Mary Saun commented that some gerberas were harvested too young that the peduncles were not upright.



Among the cordyline leaves, Mary Saun said white-lined green cordyline leaves were not as common and were good in arrangements.



For large non-common pink anthuriums that Jennifer brought as samples, Mary Saun was only able to pay K3-4.

All of the sample leaves brought from Goroka were in good demand in POM, according to Mary. They included red cordyline (short and long), fish bone fern, hoop pine branch, and asparagus leaves. Among the cordyline leaves, Mary said white-lined green cordyline leaves were not as common and were good in arrangements. For arum lily, Mary was very concerned about its short vase-life and would order a small amount (30-50/weekly) only unless there was a standing order for wedding. One grower mentioned that sometimes florists could trim the edge of the petal to give a new fresh look, but Mary wouldn't do that. In general, the feedback from Mary is that she would buy only if growers can guarantee regular supply of quality products at very competitive prices.



Curcumas are in good demand.
However, Mary commented negatively on the black spots on the green part of the flowers.



Hundred roses or button roses (local names) are a kind of new flower for the POM market and are in good demand as they are long lasting.

That evening, the team sat down together reflecting on the prospect of developing relationship with Mary. Emotionally, the growers were somewhat distressed by Mary's unfavourable reception. Perhaps part of the disparity comes from the difference between village growers who value relationship and harmony and city buyers who look for commercial interest and transactions. Relationship can only develop when both sides are ready to partner. Growers are not yet ready to supply quality product with consistent quantity at competitive prices. The florist seemed to prefer a more transaction-based

relationship at this stage. Mary was unable to offer premium prices for quality flowers. For example, the large anthuriums that Jennifer brought with her could well be sold for K5 in Goroka or K3-4 to POM bulk buyers, but Mary was only willing to pay for K2-3. For cordyline and other leaves, Mary was only ready to pay K1 per bundle filling tightly the space between the index finger and thumb. A bundle would be about 15 medium leaves (or 6-7t/leaf) or 10 large leaves (10t/leaf). Growers expressed later after the meeting to the team facilitators that for medium leaves, 10t/leaf would be fair and for large leaves, more than 10t/leave could be expected. While Mary stressed that inconsistency of supply by growers is a serious issue to her, one grower said Mary's order has been inconsistent<sup>3</sup>.







For cordylines (left and middle), asparagus branches (right) and other greeneries, Mary was only ready to pay for K1 per bundle filling tightly the space between the pointer and thumb. A bundle would be about 15 medium leaves or 10 large leaves. White-lined cordyline leaves (middle) are less common and great in arrangements as expressed by Mary.

There will be two major international events to be held in POM in the next five years, the 2015 South Pacific Games and 2018 Asian Pacific Economic Cooperation (APEC). For each event, Mary anticipates her demand being K5000/week worth of cut flowers and foliage. The information from Mary Saun is outlined in Box 2.

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<sup>&</sup>lt;sup>3</sup>Another comment from growers about Mary Saun is that she has been conducting many training workshops on growing anthuriums and floristry. In one training for anthuriums, growers paid a hefty K8,000 for a four-day workshop. However, one trainee revealed that, following Mary's planting techniques, 80% of her anthuriums died. In another floristry training in Goroka by Mary, a fee of K300 was charged, where K200 were met the Department of Primary Industries. One more such workshop will be held later in 2013 on drapery, such as decoration for walls, desks and chairs for weddings.

# **Box 2: Buying information from Mary Saun**

Mary Saun wanted a consistent supply of flowers from growers that are of impeccable quality.

- 1. Anthurium –good demand, K2-3/cutting for a large good one
- 2. Arum lily 30-50/week, but mostly used in weddings and special occasions only
- 3. Dalia no demand in POM because of its short vase-life
- 4. Day Lily- 700/ week
- 5. Gerbera 50/ week, the most preferred in Port Moresby being red gerbera
- 6. Gladiola good demand
- 7. Ground orchid no high demand
- 8. Hundred roses/button roses a new flower for POM, good demand as they last long on flower arrangements
- 9. Roses for special occasions only
- 10. Tuberose 30-50/ week, good demand in POM

For all leaves, K1 per bundle filling tightly the space between the pointer and thumb. A bundle would be about 15 medium leaves or 10 large leaves, i.e., 6-7t/medium leaf and 10t/large leaf.

After meeting with Mary Saun, the project team headed for a project workshop held in Laloki, where NARI's POM station is situated. Both Josephine Waieng and Salome Denber, POM florists that the team hoped to get in touch with, came to the project workshop. An arrangement was made then to meet with them separately the next morning at the team's hotel apartment.



Upon arrival at the apartment hotel, the team put cut flowers from Goroka in sugar and bleach solution.



At the apartment hotel, cut flowers are now properly displayed in trimmed mineral water bottles waiting for POM florists, Josephine and Salome to comment.

# 2. Josephine Waieng

Josephine Waieng is a home-based florist in POM and has contracts to supply offices, including the Parliament House. She buys anthurium from Rose Gendua in Lae<sup>4</sup>. She hasn't bought flowers from Goroka, where better anthuriums are grown, before and was keen to discuss with the growers. Josephine revealed that Rose and her are in-laws and Josephine was quite comfortable talking with us freely. As floricultural accessories, such as oases, boxes and containers are scarce in Lae, she often sent them to Rose in Lae in exchange for flowers. In this trip, the team brought back some of these accessories from Josephine for Rose.



The team brought back some of the floristry accessories from Josephine in POM for Rose Gendua in Lae. The large plastic container is what Rose used for placing anthuriums. The pile on the left of the container is Chinese take away food containers made of waxed paper. The right pile is plastic containers. Both kinds of containers can be used to hold floral arrangements.

Compared with Mary Saun interviewed the day before, Josephine was very keen on the samples that the Goroka growers brought. For the flowers that she bought from Rose, she kept the ones that she needed, the rest were to on-sell to other florists in POM. She liked to get non-common pink anthuriums and said that a large single cut of non-pink anthurium can fetch K10-15 in POM. For a good non-common pink anthurium that Jennifer brought from Goroka as a sample, she was able to pay for K4. Consistent with Mary Saun's comments, she told the two growers that gerberas and anthuriums should be harvested when matured for peduncles to be upright, and for cordylines, leaves should be thicker and tougher to last longer. She was always looking for new flowers to attract customer attention. Josephine suggested that all products better be graded and packaged separately. For arum lily, Josephine uses many of them for wedding arrangements which she can charge for as high as K1,000 per ceremony.

Josephine pointed out that cut flowers with long stems were generally preferred to enable larger arrangements although they could be difficult to package. She also likes to buy dried flowers if available. Currently, she buys from Mt Wilhelm. Josephine was willing to work around some quality issues, like putting wires inside or outside of gerbera stem to keep the stem upright. She does arrangements on Sunday night to deliver on Monday morning, unfortunately at present, there is no flight between Goroka and POM on Saturdays and

<sup>&</sup>lt;sup>4</sup> Rose is happy with selling flowers to Josephine Waieng in Port Moresby because Josephine pays all flower and freight costs before shipment.

Sundays. Josephine emphasised to the growers that customer satisfaction is more important than making immediate money. Buying information from Josephine is outlined in Box 3.

# **Box 3: Buying information from Josephine Waieng**

- 1. Anthurium K4/cutting for large non-common pink
- 2. Agapanthus good demand and good vase-life
- 3. Arum lily good demand, especially for wedding
- 4. Cordyline leaves 0.2-0.5t/leaf, the best prices among the florists interviewed
- 5. Dried flowers various colours of dried flowers in good demand
- 6. Ground orchid: K5/cutting
- 7. Tuberose good demand

#### 8. Salome Denber

Salome Denber is both a grower and home-based florist trading as Moresby Flowers. She brought several growers/florists with her to meet with the team. She was thrilled to meet with the Goroka growers. Currently, Salome got most of her flowers from her extended families in POM. She and two other growers in the extended family visited the hotel apartment that the growers stayed at. For a brief period in the past, Rose Gendua in Lae test supplied Salome some tropical cut flowers, but as similar products could be obtained in POM, there had been no order from Salome for some time. Salome hoped to set up a florist shop and various kinds of flowers from Goroka. She was thus very enthusiastic about meeting with Goroka growers and suggested a test order of anthuriums straight away. Currently, on average, she makes 20 arrangements weekly. She also goes to two craft markets, one in the beginning weekend of each month, the other at the ending weekend of each month. Salome expressed that she won't grow flowers any more but to focus on marketing of floriculture. In regards to pricing, her buying prices are acceptable to growers. For example, for small cordylines leaves she indicated K1/10 leaves, and K2/5 leaves for larger ones. The general impression on Salome was that she was a potential buyer and her ability to order consistently remained to be seen.



Salome (far right) is listening to Goroka grower Jennifer (second right). Salome brought several growers/florists (two of them on the left) with her to meet with the team.

# 9. Sally Napolioni

Sally has several lines of businesses, one of which is running a florist shop. When the team visited her shop, Blooming Flowers located in Vision City, an up-market shopping mall, Sally was not there. The local team facilitator called her and she said she would call back for her availability. However, the team did not hear from her. It is known that Sally had two unsuccessful shipments of cordyline leaves from Goroka to Melbourne. Since then, Sally has been focusing on the PNG market only. It is also known that for growers to supply Sally via her Goroka trader, growers must have attended her fee-paying trainings. Even though Sally was unable to meet with the team, growers had a good look at the loose cut flowers and arrangements in her shop.





Display at Sally's shop, Blooming Flowers in Vision City, the most up-market shopping mall in POM. Tuberoses (at the back of the left photo) are from Margaret Harvey in Goroka.

#### 10. Janet Nani

The team only found out that it was worthwhile to talk to the florist, Janet Nani, after arrival in POM. Janet is a younger entrepreneurial lady from Western Highlands and seems to be able to find a place in POM through providing services in floriculture. She has established some fame locally through supplying to various functions, concerts and expats. She had the first florist 'shop' named City Flowers, in Vision City shopping mall in POM, although it was just a cart or island in the middle walkway in the shopping mall. Due to high rental cost, she operated through a six-monthly short term rental contract with the mall central management. Later on, Sally Napolioni, moved in trading as Blooming Flowers, through sharing part of the space with a printing business. As the printing business is able to sign a long term rental contract with Vision City, central management could not allow Janet to sell flowers in Vision City any more. Currently, Janet operates her florist business from home, but she remains her presence in Vision City through selling her mother's handicrafts in the mall. Because of this presence in Vision City, she can still talk to her shopping mall customers. Janet hasn't bought any cut flowers or foliage from other provinces. The team

talked and showed her the sample products from Goroka at her craft cart in Vision City. With the team's conspicuous sample flowers in hand, which could mean violation of the rules of Vision City's central management, the team couldn't discuss the details with Janet. However it appeared to be a good short meeting between Janet and the two Goroka growers. The growers had Janet's business card.



Meeting with Janet Nani, proprietor of City Flowers, who used to have a cart in Vision City shopping mall. Now Janet operates from home for her floristry business, but remains her presence in Vision City through a craft cart showing in the background of the left photo.

#### **PART II**

## Observations from Walking the Goroka/POM Value Chain

# Growers are the Weakest Link in the Goroka/POM Floricultural Value Chain

One consistent observation in the PNG floricultural value chain is that growers are the weakest link in the chain in the context of growing techniques, access to technical and market information and knowledge, and business skills. The Goroka/POM value chain is no exception. In regards to business skills, it appeared that representative growers were still uncomfortable initially talking to florists, although this could be improved easily with some guidance and scaffolding. For example, one grower was able to talk to a florist after the local facilitator handed the mobile phone to the grower and encouraged her to participate in direct personal communication. Another observation was that growers were yet to see from florists' perspective. For instance, the growers needed to be reminded to display samples that they brought from Goroka in a more attractive way, such as using mineral water bottles as temporary vases to display cut flowers and foliage upright. In the encounter with an astute and very articulate florist, the florist gauged worthiness to deal with the growers by probed issues like the size of growers' land, number of anthurium plantings, etc. The growers were simply responding to questions and were not asking questions such as her quantity and quality specifications. The team facilitators needed to jump in on behalf the growers in this regard. On the notion of measurement, growers need to communicate with accurate measurements, for example, regarding their land size and the lengths of anthurium spathes for large, medium or small. Walking the floricultural value chain activity has made growers be aware of these aspects. Overall, a sense of equal partnership did not seem to be present between village growers and city florists as yet.

Currently in the not-so-well-established Goroka/POM supply chains, growers only perform the function of growing. Growers often sell products to a local consolidator, who then onsells to a POM florist. The POM buyer looks after booking and pays in advance for air freight. Training at the grower level on all aspects of modern supply chain management, including growing, postharvest handling, quality standards, communication and business skills are needed for growers to offer value in the Goroka/POM value chain. Only when growers are skilled, then are florists ready to partner with them and build a trustworthy commercial relationship.

Misinformation at the grower level is common. Some women got into floriculture in a hasty manner through second- or third-hand information, went to workshops with little idea about the nature of the workshop and the qualification of the deliverers. As a result, many women hold on to inadequate skills of growing flowers.

On a positive note, some level of growing specialisation is occurring whereby certain Goroka growers are focusing on specific lines of cut flowers. Following suggestions from florists, a few growers focus on growing anthuriums and some others on tuberoses<sup>5</sup>.

# Lack of qualified trainers

Knowing the potential of floriculture to improve livelihoods, many women like to get into floriculture in their own way as growers and/or florists. They are willing to pay, or invest in their skills to attend training courses. Given this demand for knowledge among the grower communities, some florists with inadequate and inexperienced growing knowledge conducted trainings for growing flowers with a view to making money<sup>6</sup>. Training fees are often exceedingly expensive for growers, in hundreds or thousands of Kinas. Many women heard about training workshops from friends and relatives and committed to the courses without verifying the credentials of the trainers. Information, or unfortunately sometimes misinformation is easily spread in societies of developing countries that value collectivism, like that of PNG. The positive aspect is that the government is funding floriculture, however, there is shortage of qualified trainers and funding has been allocated to unqualified trainers, even though who were probably the best locally qualified deliverers. There was the wariness that some unqualified people, especially florists, use training as a substantial source of income.

The training offered by David and Dorothy Dowd on growing techniques in Lae and POM for tropical flowers in July 2013 was free and invaluable to participating growers. There is an urgent need to offer and co-ordinate more of this kind of training for subtropical and temperate flowers as well. It is also vital to organise training workshops by selecting suitable growers to participate<sup>7</sup>.

# The delicate issue of holding on to information

The project team gets to know the floricultural players little by little as many growers who are doing relatively well are not comfortable in divulging their situation to other growers and the project team<sup>8</sup>. This means developing rapport and friendship between the project team and growers is important to understand their situation before the project team can assist them. Developing rapport can be made through visits to growers' places or initiation of communication by the project's local team.

<sup>&</sup>lt;sup>5</sup> For example, Margaret Harvey in Goroka mainly grows tuberose to sell to Sally Napolioni in POM. Rachel Jubol in Goroka grows mainly anthuriums to sell to Sally Napolioni via Margaret.

<sup>&</sup>lt;sup>6</sup>In the recent technical workshop conducted by David Dowd and Dorothy Dowd, they expressed that many growers came with incorrect knowledge. They had to spend more effort to get growers to forget about previous incorrect knowledge and give up previous practices for growers to embrace new knowledge and skills. Some of the participants in this year's workshop in Lae and Goroka were not in last year's workshop or vice

<sup>&</sup>lt;sup>8</sup>This comment is based on several anecdotal evidences. One Lae grower told the Australian facilitator privately that she sent anthuriums and others to POM. It is also through private conservation that the team learned that one Goroka grower sent cordyline leaves to New Zealand.

In regards to growers' access to and sharing of information, one recommendation in previous year's value chain report was to establish an information centre for growers, including those women in floriculture. NARI now has an Information Centre to link up projects involving NARI as a partner<sup>9</sup>. This is good news in the context of knowledge management at the government level. It is perhaps worthy of inquiry into ways this floricultural project might benefit from linking up with other projects that are currently underway.

# To establish floricultural growers' co-operatives in Lae and Goroka

It appears that Lae growers and florists tend to work in their own groups only. In Lae, many florists, although working from home, register their businesses with the government body, the Investment Promotion Association (IPA) to operate as a formal business entity. Some Lae growers are gloomy about the prospect of establishing a co-operative<sup>10</sup>. Currently there are quite a few small floricultural groups in Lae with varying levels of cohesiveness. One Lae group has recently been dismantled<sup>11</sup>. Notwithstanding, women were able to come together for some volunteer work at the Lae Botanical Gardens, which was a positive response to the consultants David and Dorothy Dowd's initiative to tidy up. There was hope that some kind of 'Friends of Lae Botanical Gardens' could be established. Perhaps properly facilitated, women growers in Lae would be able to work together for common goals, including establishing a floricultural co-operative.



Kwina Abang (right, her daughter on the left) is a successful business woman in Lae who has estates. Kwina talked about offering half an acre of her land as 'mother garden' i for NARI to use in the 'mother and baby trial'. Kwina drove her van (in the photo) to pick up some growers to the Lae workshop. She invited the Australian facilitator and the consultants, David and Dorothy Dowd to dine at the restaurant at her residence complex where there is a 20-room guesthouse.

<sup>&</sup>lt;sup>9</sup> The co-ordinator is an Australian expat, Loure Fooks.

 $<sup>^{</sup>m 10}$  In the Lae focus group discussion, for example, Carol Ahi, a successful florist, expressed so.

<sup>&</sup>lt;sup>11</sup>The Bubia group in Lae has dismantled. Some women have joined other groups. Others, like Rose Gendua, do not belong to any group any more. Rose pays a large annual fee of K150 to stay in the WIA network. Growers only need to pay K20 to their individual small group, which pays K300 for annual WIA membership.



Some focus group participants at Lae. Rita Tavatuna (far left), a buyer of decorative arrangements. Carol Ahi (far right), a successful grower/florist.

Their business cards shown left and below.



Rita, from Lae, becomes a buyer of arrangements through her access to business houses from working with a professional cleaning company.



Carol Ahi,from Lae, is also a grower/florist who buys cut flowers in her extended family network. The consultants, David and Dorothy Down visited her farm.

\* Logistics \* Catering \* Finance \* Office Stationery supply

\* Video Productions \* Bright Box Solar Lights \* Floral Sales & Decorations



Endo Tannis, from Lae, is widely known among Lae growers for the floricultural services that she provides.



Women were able to come together for some volunteer work at the Lae Botanical Gardens, responding to the consultants David and Dorothy Dowd's call out for tidying it up. There was the hope that some kind of 'Friends of Lae Botanical Gardens' could be established.

In contrast to the circumstances in Lae, Goroka growers are relatively organised in the context of working together. The prospect of establishing a cross-group co-operative in Goroka is more positively embraced by the growers there. There are only two larger floricultural grower groups in Goroka, the Eastern Highlands WIA Group and the Goroka District Floricultural Group. There have been more personal interactions across the two groups. After walking the value chain activity in July 2013 by two representative growers from each of the two Goroka groups, the two growers have established good friendship and appreciate the benefits of establishing one floricultural growers' co-op. The immediate benefits thrashed out among the representative growers and project team members include joint purchasing of farm inputs and floristry accessories from POM, bulking up of quantity, centralised grading and packaging, improved logistical co-ordination for sending products to POM, and access to training workshops by qualified deliverers. Currently, Goroka local government appears quite supportive of floriculture involving women<sup>12</sup>. In the event that the co-op also owns the florist shop under consideration, there will be further benefits of setting up a computer with the Internet connection for many growers to use and access information.

#### Other potential floricultural growing areas to look at

So far the project team has focused on Lae, Goroka ad POM growing areas. There are several other areas in Morobe province that have cooler climate and are suitable to grow subtropical to temperate flowers. These are areas like Bulolo, Mumeng and Wau. Bulolo is only two-hour drive from Lae. In Bulolo, women plant flowers between coffee trees<sup>13</sup>. It is also the site where the mining company, Morobe Mining Joint Venture (MMJV) is located. It is understood that MMJV might be able to build a cold storage near Lae airport. Perhaps this good will of corporate social responsibility might be followed up by the project team. The facility would be useful for flowers from cooler areas of Morobe province, such as Bulolo, Mumeng, Wau, Mudzing and Water rice, to send to POM.

# **Concluding Remark: A way Forward**

After walking and reviewing the Goroka/POM floricultural chain, suggestions are put forward here for improvements at the grower level for the Goroka/POM value chain.

<sup>&</sup>lt;sup>12</sup> For the first time in the history of PNG, the incumbent Governor of Eastern Highlands is a woman, Julie Soso. It was mentioned that the new Governor would pump in more funding for the African yam project that Jennifer Kena has been heavily involved in. Growers conveyed that the current advisor to Department of Agriculture and Livestock (DAL), Mr Bubia Muhuju is very supportive of floriculture. He is thus someone the project team might approach to work with.

<sup>&</sup>lt;sup>13</sup>Maura, a member of WIA, from Bulolo attended the Lae workshop. The team learned that, with the help of her husband's writing skills, recently WIA got funding from AusAID for training workshops. However, as mentioned before, the issue of getting qualified trainers to deliver the training remains.

- The first step is capacity building to train the trainers and key growers in all facets of
  production of subtropical cut flowers, including growing, harvesting and post-harvest
  techniques. Selection of right growers is important to disseminate knowledge and
  skills. Both groups, the Eastern Highlands WIA and the Goroka District Floricultural
  Groups, should have growers attending.
- 2. In the meantime, the two groups could consider ways to form a co-operative by starting a steering committee, involving champions from each group. Some workshops may be needed for understanding of group dynamics, conflict resolution, setting up and observance of rules of the game, etc. Interest and support from foreign donors (such as ACIAR) and local government (such as NARI and relevant Goroka government offices) would be essential.
- 3. Once the co-operative is properly established and functioning, there would be many opportunities for growers to realise. They include negotiation to buy farm inputs and floristry accessories jointly, centralised grading and packaging, and possibly supply chain stores like Brian Bell in POM.

All of these would strengthen the Goroka/POM floricultural value chain at the grower level. Establishing and maintaining a grower co-operative is no easy task, but it is vital to the growth and sustainability of the Goroka/POM floricultural value chain in particular, and to the development of the emerging floricultural industry in PNG in general.

#### **Postscript**

Two weeks after walking the Goroka/POM value chain exercise, the local project team followed up with Goroka growers and POM florists through telephone conversations and conveyed that there had been activities and exchanges going on.

One representative grower, Angela Monave, has gathered her Goroka District Floricultural Group members and briefed them on the value chain walk activities. She has also been in contact with the POM florist, Josephine Waieng to supply common-pink antheriums for K3/cutting for Jennifer to on-sell to the hypermarket chain, Brian Bell, in POM. Angela contacted Sally for supplying opportunities as well, but Sally wanted the group to attend her training before she was willing to buy their flowers. Due to high training fees involved to attend Sally's training, Angela suggested training by two local well- known people who had attended Sally's training and had been supplying Sally. However, Sally insisted on coming all the way from POM to do the training herself.

The other grower representative, Jennifer Kena, would arrange to meet with her group members later in August to brief them on the value chain walk activity as the Eastern Highlands WIA group members are currently busy with their council election. At the time of writing this report, Jennifer is organising within her group some flowers to someone in the University of Goroka who sends to POM (Susan) for a wedding ceremony. The flowers requested are tuberorse, cordyline foliage, baby's breath, etc. The order is jointly supplied by the Eastern Highlands WIA group members. She also had an invitation from Father Sakise from Chimbu who wants her to decorate a new resource centre. The supply of the flowers would also be shared among group members.

There was contact between Jennifer and the POM home-based florist, Salome Denber. Follow-up telephone conversation with the potential POM home-based florist Salome Denber revealed that she was very keen to buy flowers from Goroka. She intends to obtain a space in a supermarket mall that is currently under construction in POM. As up-market shopping malls often lease out to experienced retailers, Salome wanted NARI/PNGWIADF to assist by providing a supporting letter for that. On this matter, Jennifer talked to the Goroka District Floricultural Group Co-ordinator, Maggie Seko. Maggie advised that she would be able to buy anthuriums and tuberoses from growers to sell to Salome when she was not busy by the end of August 2013. Salome indicated her price for antheriums being K4/cutting and for tuberoses and lilies K2/cutting. The buyer, Salome, wanted growers to book and cover for freight costs which is usually paid in advance when booking is made. Goroka growers disagreed on this. This appears to be a sticking issue between the buyer and seller sides. Some kind of arrangement that sounds fair to both sides is needed.

Follow- up conversation with the POM home-based florist Josephine Waieng confirmed that she would start to get about K50 worth of cut flowers weekly to show case her Goroka products. This is in exchange of floristry material from POM, a model that she has been

using with Rose Gendua in Lae. The quantity of her order can pick up over time. She is currently checking for space to start up a florist shop. Josephine revealed that PNG Gardener's, the largest floricultural company in PNG, buying price for good quality antheriums is at K3/cutting. This is relevant market information for Goroka growers in the event that a co-operative could be set up and functioning.

# Appendix 1: Attendees of Goroka Workshop July 2013 and Key Contacts

# The Goroka Floricultural

Grou	n
<b>3104</b>	Ν

Name	<b>Mob Phone</b>	
Angela		
Monave	73870892	Treasurer
Daisy Apite	73283529	Secretary
Fiona		
Benjamin	73992513	
Gollie Musau	71689863	
Josephine		
Andreas	72925428	
Julie		
Namaneha	72164971	
Margaret		
Tony	73129662	
Meggie Seko	72900570	Co-ordinator
Mutume		
Agope	70631626	
Susie Bunge	72529333	
Waimale Takis	70216095	President

# The Eastern Highlands WIA Floricultural Group

Moh	
IVIOD	

Name	Phone	Send to POM	
Alice Koito	72858205	Mary	Secretary
Alufine Philip		Mary	
Bagaya Titas		Mary	
Betty Robin	70707839	Mary	
Bolina Avue	71553978	mary	
Delma Gare	72299411		Treasurer
Fulata Palata		Mary	
Jennifer Kena	73267688	Mary	Vice President
Jessica Lusek		Mary	
Mone Joe	73808228	Mary	
Martina Yambu	71480031	Mary	
Mutume Agope	70631626	Sally Mary	
Rachel Jubol	70574231	Sally Mary	
Regina			
Arapuso	73913428		President
Winnis			
Akege'e	72870288	Mary	

# Appendix 2: Itinerary

# Sherrie Wei's visit to PNG 18-25/7/2013

Date and time	Activities	Venue
18/7 Thursday	Arrival at Lae 7pm	NARI Lae guesthouse
19/7 Friday	Project brief with NARI and FRI and	NARI
am	planning of program	
pm	Workshop on	NARI Multipurpose Building
	- Previous trip (2012 July)	
	observations	
	<ul> <li>Value chain management</li> </ul>	
20/7 Saturday	Focus group discussion with growers	- NARI Multipurpose
am		Building
pm	- Lae Botanical Gardens, 'Friends of	- Lae Botanical
	Botanical Gardens' activity	Gardens
	- Lae Municipal Market	- Lae Municipal Market
21/7 Sunday am	Travel to Goroka by road	
pm	Focus group discussion with growers	Research Conservation
		Foundation in Goroka
22/7 Monday	Workshop on	Research Conservation
am	- Previous trip (2012 July)	Foundation in Goroka
	observations	
	- Value chain management	
pm	Visit Fiona's farm	
23/7 Tuesday	- Flight to POM	
am	Marating with floriate in DOM	
pm	Meeting with florists in POM	Many Count on loca
	<ul><li>Meeting with Mary Saun</li><li>Presentation at NARI Laloki, POM on</li></ul>	<ul> <li>Mary Saun's place</li> <li>NARI office at Laloki,</li> </ul>
	previous trip (2012 July)	POM
	observations	POIVI
24/7	Meeting with florists in POM	Comfort Inn (Team's
Wednesday	- Josephine	accommodation venue)
am	- Salome	decommodation vende,
pm	Meeting with florists in POM	Vision City shopping mall in
P	- Blooming Flowers in Vision City	POM
	- Janet of City Flowers in Vision City	
25/7 Thursday	Meeting with	
Am	- Clifton Gwabu on ISHS paper	- NARI office at Laloki,
	- Emily Flowers at the Australian High	POM
	Commission	- Australian High
	Departure	Commission