

Agribusiness & landowner partnership models: Some cases from the Markham Valley agriculture corridor

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Preface – Executive Director Grow PNG

The following are a few of the interactions I've had with landowners and agribusinesses in recent years. But these difficulties had always existed, and many were extremely familiar with them. If nothing is done to solve these and numerous other problems of a similar nature, they will persist.

- A year ago today, two landowner brothers asked me whether I might assist them in arranging a new business partnership after their last one failed. They had everything, but they blew it up.
- I also learned of the ongoing theft of an agricultural company's cattle herd from one of its leaders. And in great numbers. He thought the burglars may have connections to local landowners or came from nearby areas.
- I also learned about a vegetable depot startup that has been trying to get off the ground for a while now but never seems to succeed, at least not yet. The government, at least, does not appear to be providing any funding.
- I also learned that a larger agribusiness organization had to withdraw from one area of their business portfolio in order to reinvest in another because of problems that they encountered with landowners. Why would they act in that way?
- I have encountered and spoken with a lot of smallholder farmers who attempted to obtain a bank loan to expand their modest agribusiness but found that the banking system was not helpful to them. Could agribusiness guarantee their loan?
- Any of the landowners I met with were anxious to provide their property for agricultural development, but nobody was willing to collaborate with them.
- □ Many foreigners complained to me about their difficulty getting access to land to start agribusinesses in the nation.

The difficulties listed above are only a few of the numerous obstacles to creating a long-lasting collaboration that benefits both landowners and agribusiness partners.

The case studies of these ten entities each present their unique stories on how the Markham Valley's reality differs bringing its differences and commonalities to the fore so others within the agriculture and food systems could benefit from their experiences. Several others across the Morobe Province and nation have similar stories of their own. It is anticipated that this conversation will be the first of many that explore new approaches to bring about a win-win partnership between landowners and agribusiness.

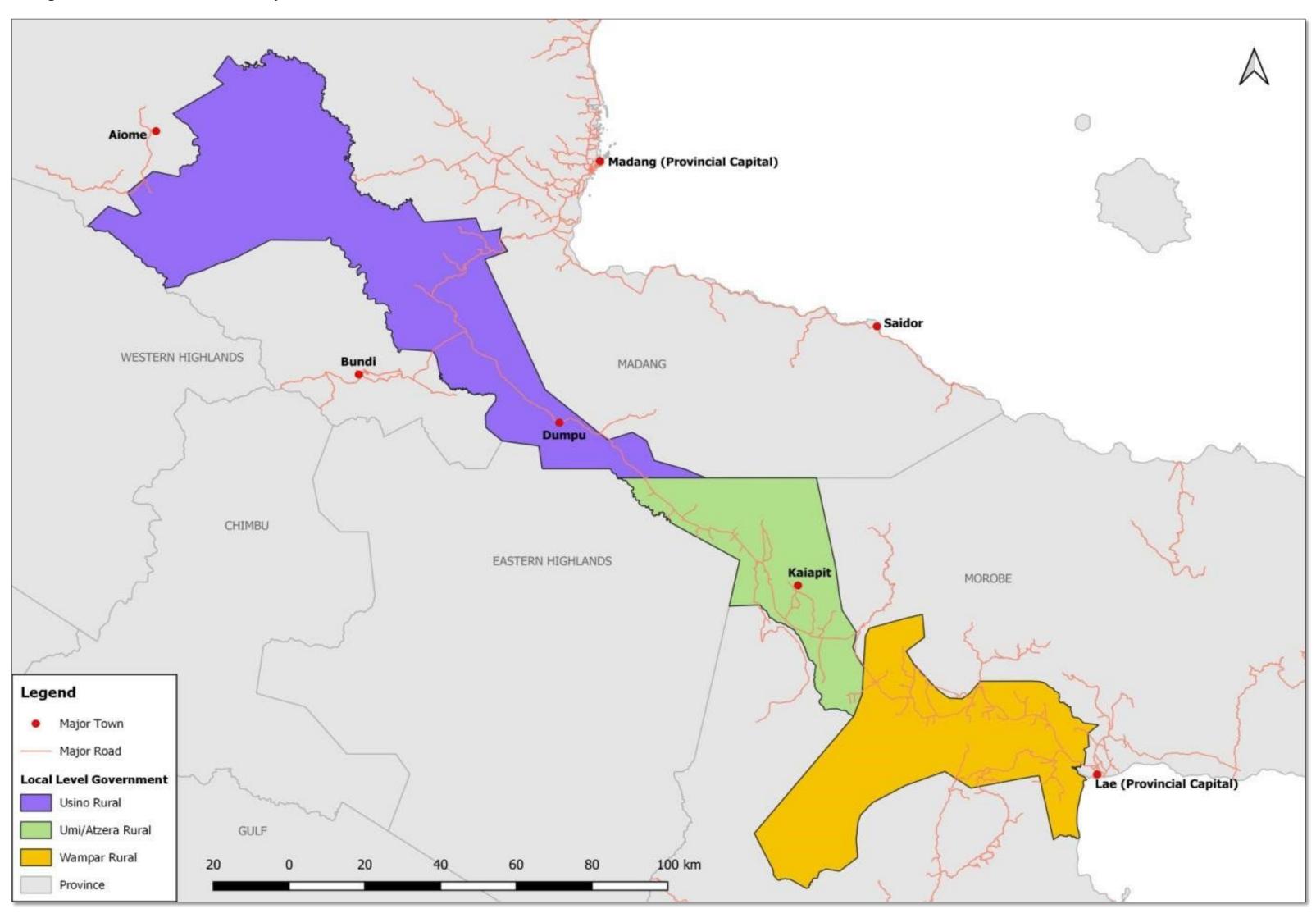
John Lloyd Simango, ML **Executive Director Grow PNG**

Presentation Outline

- Introduction 1.
- Agribusiness partnership models 2.
- Methodology 3.
- Case studies of 10 partnership models in the Markham 4. Valley
- **Key Findings** 5.
- Recommendation 6.
- 7. Conclusion

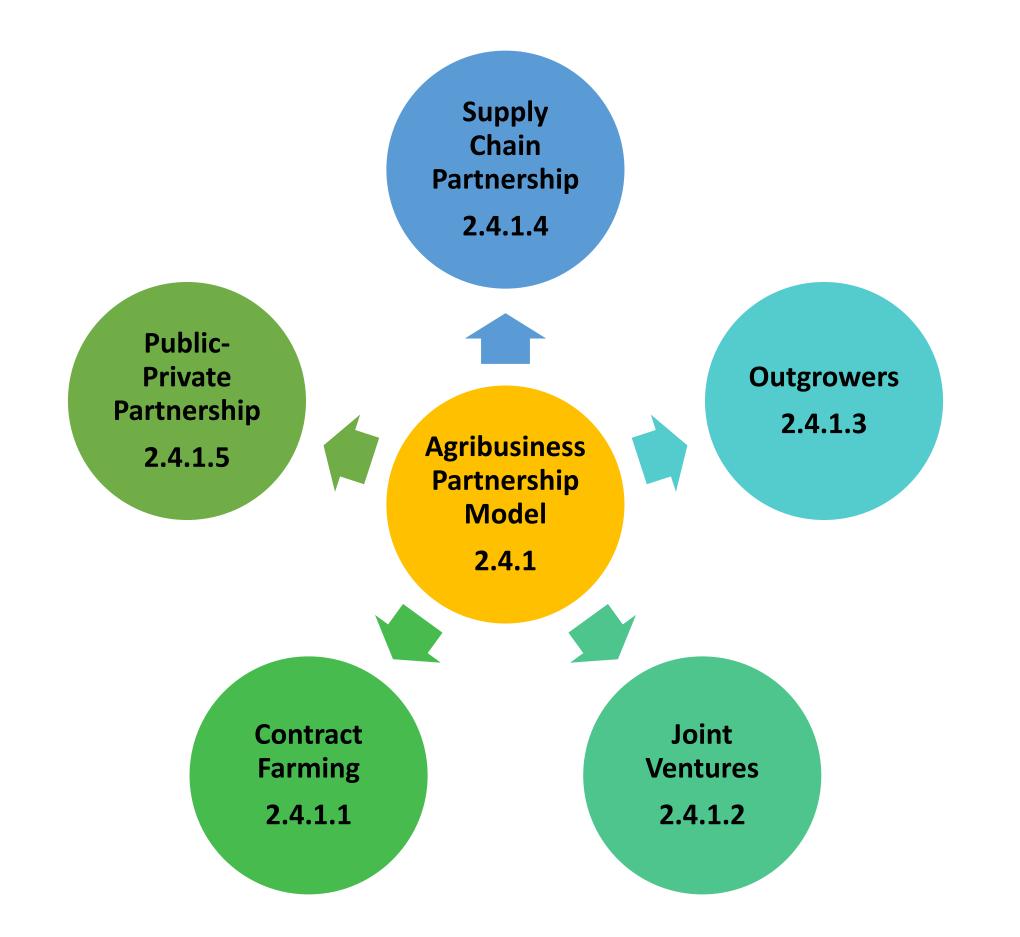
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- This report is the result of extensive conversations and analysis into the best ways to establish and maintain • a smallholder agribusiness partner over the long term. Existing agribusiness entérprises are under pressure to reevaluate their business models due to the emergence of local landowners who want to benefit from or engage in agribusiness ventures in their area.
- Those who are already a part of the collaboration are likewise under pressure to review or revise it. In either • case, a successful and long-lasting partnership appears to depend heavily on accommodating the interests of the landowner. The new agribusiness will have to take heed of this situation so are prepared.
- The ten case studies that were done for this report show that landowner partnership does work, but has its ulletchallenges too.
- Managing partnerships between agribusiness and landowners is critical for the success of the partnership, • and the overall investment. This means adhering to the agreement and keeping watch of the changing landscape of the environment locally and internationally one operates within.
- As will be pointed out in the presentation benefit sharing mechanisms need to be properly understood and ۲ communicated to all the stakeholders. And those existing businesses who are in the process of review would be advised to properly articulate participation and benefit sharing in their review with the landowners.
- Times have changed, and the models currently in existence that have landowner components need to be • constantly checked and improved so they become relevant in this day and age. New models of partnership should always be sought so the business stays relevant and agile with the changing times.
- The Markham Valley agriculture corridor offers the country an opportunity to showcase its agricultural • potential to the world. It has the biggest seaport; international airport; a main highway that runs the full length of the main land. The national government including provincial governments should start exploring the various arrangements to see what works.
- Leadership training for local landowners who hold leadership in incorporated land groups, cooperatives, • associations, and small businesses is critical to assist them to provide leadership and management of their partnership with agribusiness, and others.



Map of Markham Ramu Valley – Map # 1: The color shows the Markham Ramu Valley from Nazab in Lae to Watarais in Markham district, and Ramu District

Agribusiness partnership models



2.1 **Contract Farming**

- In this business model, a processor or corporation enters into a legal agreement with farmers to produce a given crop or livestock • in accordance with predetermined quality and quantity standards.
- While the farmers take on the production risks and receive a guaranteed price or profit share, the firm offers inputs, technical ٠ guidance, and marketing assistance.
- For instance, RAIL assistance through its Mini-Estate and Village Oil Palm programs, NKW Fresh Produces Ltd. with its lead contract • farmers, and Mainland Holding Ltd.'s chicken out-growers. And Hore Agriculture Supplies Ltd in partnership with Farmset Ltd.
- **Contract farming has several benefits.** •
- Market Access: Farmers that engage in contract farming have a ready market for their goods. Farmers can avoid the risks of selling • their produce on the open market because they are guaranteed a buyer. The market is guaranteed, for example, the Oil Palm value chain which is locked in between RAIL and its farmers, as well as NKW Ltd. and its farmers, and Mainland Holding Ltd. and its farmers.
- **Price Stability:** Farmers that engage in contract farming receive a guaranteed price for their produce, thereby stabilizing their • income and lowering the risk of price swings. In light of the aforementioned illustrations, NKW Fresh Ltd. pays its farmers a particular sum from the crop. Likewise, Mainland Holdings, RAIL, and its Oil Palm farmers.
- Access to Inputs: As part of the contract agreement, buyers frequently give farmers access to inputs like seeds, fertilizer, stock • feeds, and insecticides. As a result, farmers are under less financial strain and have access to high-quality inputs.
- Technical Assistance: To help farmers improve their production methods and boost yields, buyers frequently offer technical aid • and training to farmers. The extension officers from RAIL, Mainland Holdings Ltd, and NKW Fresh Ltd are on the ground assisting farmers.
- **Enhanced Productivity:** Farmers who use contract farming are more likely to adopt improved farming techniques, which can boost • output and produce of higher quality. For instance, NKW Fresh Ltd recently offered modest soil tilters through a loan guarantee program from Mi Bank Ltd to assist farmers in getting the machinery they need to prepare land for planting.

2.2 Joint Venture

- In this business model, two or more companies combine their resources and knowledge to create a new • organization that splits the risks, expenses, and profits of a certain agriculture activity, such as farming, processing, or exporting. Joint ventures may provide more bargaining power, access to new markets, and economies of scale. In PNG, the term "joint venture farming" refers to an agricultural partnership including international investors and indigenous farmers who agree to split resources, knowledge, and profits.
- Joint Venture Farming's benefits include. ٠
- **Financial resources**: With joint venture farming, local farmers may have access to funds, machinery, and ۲ technology that they otherwise might not have been able to buy. This could help boost output and enhance the caliber of the crops.
- **Transfer of knowledge:** Joint venture farming enables the exchange of knowledge and skills between ٠ international investors and local farmers, which may enhance farming methods and boost yields.
- Jobs can be created through joint venture farming for local farmers, their families, support personnel, and • management.
- Economic expansion: By boosting agricultural output and exports, generating income, and opening up trade •

opportunities, joint venture farming can help PNG's economy expand.

2.3 **Out-growers**

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- An agriculture out-grower model of farming is a system in which smallholder farmers, known as out-growers, are • contracted by a larger farming organization to produce a specific crop or product.
- Under this arrangement, the out-growers are responsible for cultivating the crops, and once harvested, they sell their • produce back to the bigger organization at a predetermined price. This arrangement provides a guaranteed market for the out-growers and enables the larger organization to secure a consistent supply of the crop or product.
- The larger organization provides the necessary inputs, such as seeds, fertilizers, pesticides, and stock feeds, as well as • technical support and training to the out-growers. Both parties may benefit from the out-grower farming model. The assistance and instruction offered by the larger organization can be helpful to out-growers who might not have access to credit or other resources.
- They also have a guaranteed market for their crops, which can help stabilize their income. The larger organization • benefits from having a reliable supply of high-quality products, which can be essential for meeting demand and maintaining consistent product quality. For example, Mainland Holdings Out-grower scheme, NKW lead farmer scheme, RĂIL Oil Palm Mini-Estate, and VOP
- Advantages of the Out-grower Model of Agriculture: ٠
- **Increased productivity:** The out-grower model can increase productivity as it allows for the efficient use of resources, ٠ such as land, labor, and inputs. This is so that the out-growers can receive the necessary inputs, technical support, and training.
- Guaranteed market: Out-growers have a guaranteed market for their crops, which can help stabilize their income and • reduce price volatility. This is because the larger organization typically contracts to buy the out-growers produce at a predetermined price.
- Access to finance: Out-growers may have access to funding and credit facilities, which may not be available to them ٠ otherwise. This is so that the larger organization can obtain loans for the out-growers by using its creditworthiness.
- Risk reduction: The out-grower model can assist in lowering the risk for all parties. Out-growers benefit from the • support and training provided by the larger organization, which can help minimize crop failure and other risks. Having a consistent supply of superior products is advantageous to the larger organization.

2.4 Supply Chain Partnership

- In this concept, many supply chain participants, including farmers, processors, traders, retailers, and consumers, work ۲ together to raise the value chain's effectiveness, caliber, and sustainability.
- Partnerships in the supply chain may involve information exchange, the adoption of standards, infrastructure • investment, and the promotion of social and environmental responsibility.
- For instance, Wia Trade with its factory for coffee and cocoa buying depots, Outspan Ltd. with its cocoa buying desk • and warehousing, Ellivien Ltd. with its buying desk and warehousing, Farmset Ltd. with its factory, machinery, and equipment, GoPNG commodity boards, Fairtrade, Oil Palm RSPO standards, Grow PNG Multi-stakeholder platform, STREIT program in East Sepik, Phamarplus, MDF, Incentive Fund, and other bilateral programs in the country. Other peak organizations include the Farmer's Association, Lae Chambers of Commerce, Women in Agriculture Development (WiAD), Women in Coffee (WiC), and numerous others.
- A few benefits of supply chain partnerships are: ullet
- **Reduced Costs:** Farmers can cut production, distribution, and marketing expenses by collaborating with ۲ others in the supply chain. They may be able to make high-quality goods for less money as a result.
- **Enhanced Efficiency:** From production to distribution, supply chain partnerships can improve the • effectiveness of the entire process. This can assist businesses cut waste, slashing expenses, and boosting revenue.
- Increased Quality: By working together, farmers, processors, distributors, and retailers can ensure that ulletproducts meet high standards of quality. This may promote greater consumer loyalty and trust.
- Increased Market Access: Supply chain alliances can give farmers access to new markets and • consumers. They could grow their companies and make more money as a result of this. For instance, large retail establishments in Lae and Port Moresby, such as SVS Ltd, CPL Group Ltd, etc., buy directly from farmers or aggregators.
- Sustainable Farming Methods: Supply chain alliances can support environmentally and resourceulletconserving sustainable agricultural méthods. As an illustration, RAIL's application of RSPO is one way to guarantee sustainable practices. Another is fair trading, organized through DFAT Fairtrade, and Agmark coffee and Spice Ltd certification program.

2.5 Public Private Partnership

- In this model, the government, private sector, and civil society engagement to address common concerns in • the agricultural sector, such as infrastructure, research, extension, or policy reform. Public-private partnerships can take advantage of each sector's advantages and assets to accomplish common objectives and provide for the public good. For instance, PNG Biomass Ltd., involved in agroforestry, has partners from PNG Power Ltd and Oil Search Ltd but has been reviewed since the entry of new partners. Innovative Agro Industries has partnered with various provincial governments (Central, Western Highlands, Hela, Enga, and East Sepik) in vegetable farming, dairy farm productions, and supply at Sogeri outside of Port Moresby.
- Public-private partnerships have the following benefits: ullet
- **Increased investment:** By utilizing the resources and know-how of the private sector, PPPs can increase ulletinvestment in the agricultural sector.
- **Efficiency gain:** By combining the strengths of the public and private sectors, PPPs can result in more • effective agriculture service delivery.
- **Improved market access:** Through partnerships with private sector businesses that have experience in • marketing and distribution, PPPs can assist farmers in accessing new markets.
- **Better risk management:** By dividing risk between the public and private sectors, PPPs can help to mitigate • risk and lessen the burden on any one stakeholder.
- **Enhanced creativity:** PPPs can drive innovation by encouraging collaboration between multiple stakeholders • with varied skill sets and viewpoints

3.0 Methodology

3.0 Methodology

Two researchers conducted the study utilizing semi-structured questionnaires and interviews. The 47 people who were interviewed included former owners of a failed commercial farm, chairmen of a sizable cooperative society group, private commercial farm owners, women in an agriculture civil society group, executives from large commercial agriculture farms, and government officials from the Markham Ramu Valley. There were 25 men and 22 women in the group.

Interviews took place from April through May of 2022. Re-examining the information gaps to look for clarification and confirmation was part of the validation process. Each case study's result was recorded, followed by a summary, conclusion, and set of suggested changes.



4.0 Case Studies of 10 Partnership Models in the Markham Valley.

In Markham Ramu, there are several types of agriculture collaboration options. Ramu Agri Industries Ltd (RAIL) administers its own sugarcane and cattle farm and also purchases cattle from semi-commercial and smallholder cattle farmers. It also operates major commercial agriculture, such as mini-estates and Village Oil Palm (VOP) for its oil palm output. Rumion Ltd. manages its own industrial pig farm and contracts with a few farmers to cultivate maize for its feedstock. On the side, it also manages a livestock operation. A sizable factory for processing chicken, as well as farmer out-grower initiatives, are handled by Mainland Holdings Ltd. In addition to running a sizable commercial rice processing plant, Trukai Ltd has experimented with commercial rice cultivation, such as the unsuccessful Chingwan commercial rice farm, in partnership with landowner cooperatives until its demise. It now employs a small number of smallholders, operates a farmer program at the University of Technology, Lae, and farms rice seeds in Erap. Via its nurseries for coffee and cocoa, Agmark Ltd. helps farmers and then purchases from them at farm and factory gate prices. By enhancing its value chains, Outspan Ltd assists its farmers. By means of its buying desk activities, Outspan Ltd then purchases from factories and farm gates. Operations at Ellivien Ltd. assist farmer extension programs and use buying desks to make purchases at wholesale or farm gate pricing. There are associations and groups for small-scale entrepreneurs. For instance, Ziampir Horticulture manages seed distribution provided through its partner, the Taiwan Mission at Erap and does its rice farming through its network of farmers, and Takom Farm handles seed multiplication. Smallholder farmers are numerous and engage in a variety of commercial activities, including cooperatives, associations, and small company groups in cattle, rice, cocoa, seed germination, extension services, and other industries.

In order to enlighten the general agribusiness, landowners, and others about how to build an effective partnership that may deliver win-win benefits to all parties in their attempts to grow agriculture in the valley, this study examines 10 examples within the Markham Ramu Valley. Ten of the cases are;

4.1 Case Study # 1: Ramu Agri Industries Limited (RAIL)
4.2 Case Study # 2: Morobe Province Oil Palm Out Growers Associations
4.3 Case Study # 3: Hore Agriculture Supplies Limited
4.4 Case Study # 4: NKW Fresh Limited
4.5 Case Study # 5: Agmark Limited
4.6 Case Study # 6: Takom Farm Business Group
4.7 Case Study # 7: PNG Women in Agriculture Development Foundation
4.8 Case Study # 8: Chifasing Rice Development
4.9 Case Study # 9: Lutheran Services Development (LDS)
4.10 Case Study #10: Fresh Produce Development Agency (FPDA)

4.1. Case Study # 1: Ramu Agri Industries Limited (RAIL)

Ramu Agri Industries Limited (RAIL) is a foreign-owned farm that brings in capital, and technology, employs locals, and helps develop the agriculture sector in developing countries such as PNG. RAIL's large-scale agriculture commercial or corporate farm primarily farming oil palm, sugarcane, and cattle. RAIL started operating in the Markham Ramu Valley in 2002. Its main focus is sugarcane, oil palm, and rear cattle. It cultivates large tracks of oil palm and sugarcane fields through its commercial farms, as well involving landowners in partnership through a nucleus or out-grower model of farming. It also rears cattle in quantity, as well buys them from other corporate farms and smallholders, and processes them for market overseas. RAIL deals with landowners supplying all inputs, equipment, machinery, processing facilities, and import to its markets, mostly overseas and a few locals.

Of particular interest to this study, is the oil palm operations. RAIL uses RSPO stands to access land, cultivate oil palm trees, extract crude oil from palm and kennel, and export to markets overseas. It does not have the capacity to refine crude oil. Its primary oil palm farming model is the Mini-Estate and Village Oil Palm (VOP) model, which is accomplished through a Clan Land Use Agreement (CLUA) that is fixed for 30 years, or the lifespan of the oil palm tree.

The main landowner group that participated in its VOP model is the Morobe Province Oil Palm Out Growers Association (MPOPOGA). This partnership started in 2008, consisting of 324 Land Owners groups; 71 from Madang, and 253 from Morobe Province. The farmers provided their plan in a parcel of 5–6 farmers per 2-hectare block of land. This successful cooperation generates K3 million in annual revenue for the participating landowners. In accessing land, RAIL is now working in partnership with GrowPNG Ltd and uses its platform to mobilize landowners and district partners.

Whilst RAIL's operation using its Mini-Estate and more particularly VOP proves successful, difficulties persisted with regard to land access, smallholder commitments, and government support, as well as enabling infrastructures including bridges, irrigation systems, energy sources, transportation systems, and related laws.

4.2 Case Study # 2: Morobe Province Oil Palm Out Growers Associations (MPOPOGA)

Morobe Province Oil Palm Out Growers Association (MPOPOA) is a typical landowner out-grower setup. It has all the features of an out-grower or village oil palm model that benefits from a corporate, commercial, or nucleus model of farming organized through RAIL.

MPOPOA was established in 2005, and is a landowner association, that has 324 landowners who are also smallholder farmers, and is run by a chairman elected through a committee of Integrated Land Owner Groups (ILG) chairmen from the following villages; Watarais, Marawasa, Wankun 1, 2, Ragizaria, Marasaka, bordering Morobe and Madang Provinces. It grew from a seed in 2008 funding of K250,000 from the Morobe Province Government which guaranteed a loan of K2,000,000 from the National Development Bank (NDB). Through its Clan Land Use Agreement (CLUA) between the landowner group and RAIL, it implemented this out-grower concept named VOP as the vehicle for land access. This agreement is locked in for 30 years of the life of the Oil Palm tree and will be reviewed thereafter. With their association with MPOPOGA and RAIL, 324 Smallholder Farmers (five to six farmers per 2-hectare block) are now benefiting from this project.

This successful relationship brings in K3 million annually for the landowners who are also oil palm smallholder farmers. Yet, issues with land access, smallholder commitments, and government support still exist. These issues include reckless spending at nearby Chinese shops, local customs, and local infrastructures including roads, bridges, irrigation systems, energy, and transportation. GoPNG is yet to support VOP farmers in a meaningful manner.

4.3 Case Study # 3: Hore Agriculture Supplies Limited

Hore Agriculture Supplies Ltd (HASL) is a small family business that is involved in a contract-type partnership with Farmset Ltd in growing corn or maize for stock feed in the Markham Valley. Farmset Ltd is also an agriculture services provider which provides assorted agriculture services from its shops, seed distributors, agriculture machinery, and equipment. Through its contract agreement with HASL, Farmset Ltd provides quality seeds, fertilizers, planters, and harvesters and the necessary equipment to cultivate maize, harvest, process, and delivery to its processing facility in Lae for conversion into stock feed. HASL in turn provided technical input and management of the farm. This family-run small agribusiness grows hectares of maize fields near Nadzab out of Lae, Morobe Province. It manages the farm and engages landowners through land lease agreements (LLA) in farm operations from planting to harvesting and processing. Landowners are paid for sales of crops per hectare as well as are on the payroll for doing other work. It recently trialed an innovation with Landowners where they grow watermelons underneath corn plants in order so they can provide wedding services for free to look after their watermelon plots. This arrangement has proven to work well for these small enterprises.

This small enterprise is a success story. There are many orders now being received by this small entity to supply maize to other piggery and poultry farms and processing facilities in the country. The main problem this entity continues to face is the inability to meet the market demand due to its small operation, manage landowners' expectations, and access finance to expand the farm.

4.4 Case Study # 4: NKW Fresh Limited

NKW Fresh Limited operates a corporate commercial farm model, and typically like similar firms, has access to large amounts of capital, the latest technology, and economies of scale, making them highly efficient and productive. They can also produce high yields at a lower cost. NKW Fresh Ltd's farming model is through contract farming, leads farmers', and aggregation models arrangements working along the value chains of planting to aggregation and marketing. It currently serves over 1 million meals at the mine sites of Hidden Valley and Lihir Gold mines where it is contracted, as well as local markets in Lae, Kokopo, and Port Moresby. It has offices in Wau and Lae and employs 10 females and 14 males.

NKW Fresh Ltd is the agribusiness arm of the large landowner company NKW Holdings Group of companies which started in 2007 and 2014 in Hidden Valley Mines of Wau in Morobe Province. The business gets currently employs 800 people, and it gets its name from these landowner groups: K= Kuembu Local Land Group, and W= Wanuma Local Land Group. This landowner company is a logistic company that has a number of subsidiaries in building, construction & industry, transport, logistics & export-import, produces, power & environment. It is run by a board of trustees consisting of 3 landowners, 2 board positions from the community, and 1 from the government's Mineral Resources Authority (MRA).

NKW Fresh Ltd's farming model is a success story benefiting landowners and farmers. One example of this was guarantee provided to MiBank by NKW for its lead farmers to obtain credits for soil tilers to assist prepare land for planting. However, challenges remained in land access, commitments from smallholders, and government support, enabling infrastructures such as road bridges, irrigation, energy, transportation, and related policies., unwise spending, and local cultures are a challenge.

4.5 Case Study # 5: Agmark - Niugini Coffee, Tea Spice Ltd.

Agmark - Niugini Coffee, Tea Spice Ltd is a subsidiary of Agmark Limited that is involved in buying and exporting coffee, tea, and spices to overseas markets. The company employs 41 staff, 10 females and 31 males within its Lae Operations. Overall staffing in PNG is 700, with 500 males and 200 females.

Niugini Coffee, Tea Spice Ltd operates as a corporate commercial agriculture model that participated in the supply and value chain process of Coffee, Cocoa, Vanilla, and Tea commodities. It operates a number of nurseries and buys desks where it assisted its smallholder farmers with the respective commodities. It also participated in the certification of its partners through Fair -Trade arrangements to access overseas markets.

This partnership is a success story injecting monies into the local economies through its buying desks for coffee, cocoa, vanilla, spices, and nursery programs benefiting many landowners and smallholder farmers.

However, typically, similar firms who operates within the supply and value chain would have access to large amounts of capital, the latest technology, and economies of scale, and this would have made it highly efficient and productive. However, since it is a national company, and many others like it, still faces challenges in accessing capital, technology, and economies of scale. Other challenges remained in land access, commitments from smallholders, and lack of government support, enabling infrastructures such as road bridges, irrigation, energy, transportation, and related policies, unwise spending, and local cultures are a challenge.

4.6 Case Study # 6: Takom Farm Business Group

Takom Farm Business Group is a family-run business established in 2007 and operates in the Markham Valley. This small agribusiness model is seed multiplication through nursery, rootstock budding, and distributions to local registered farmers who pay the K100 membership fee to be the priority benefactor of this business operation. Its smallholder farmer membership involves 43 cluster groups involving 17,000 farmers. It currently focuses on the main cash crops of rice, cocoa, and others such as taro. On the side, it also grows its own rice and other food crops, preparation, and marketing.

Takom farm is a success story for a small-scale family business group. However, like any other small farming business, its challenges remained in capacity building of its cluster groups, land access, access to finance, commitments from smallholders, lack of government support, lack of enabling infrastructures such as road bridges, irrigation, energy, transportation, and related government policies, unwise spending, and local cultures are a challenge. It also faces continued challenges also faced by businesses of such nature that rely heavily on selecting highquality seeds with desirable characteristics like disease resistance, the guarantee of high-quality seeds, meticulously managed and controlled seed crops, seed storage, and distributions process. Takom farm also have challenges in access land to expand it operation, and management of its relationships with the surrounding landowners.

4.7 Case Study # 7: PNG Women in Agriculture Development Foundation (WiADF)

The PNG in Agriculture Development Foundation (WiAD), is a nongovernment women's network organization formed in 2004 with local and international affiliations. Its main office is at the National Agriculture Research Institution (NARI) 10 miles in Lae. In PNG, the organization has a network of 135 women registered groups with 405 women, and 33% holding leadership positions across the country. Its main aim is to promote, support, and empower women in agriculture in all the provinces of the country. This organization participated from within value and supply chains supporting women farmers across the country. Similar to other organizations WiADF assists smallholder farmers by bringing in partners to run training for agriculture, financial literacy, gender, leadership, food and nutrition, and others within their network of women farmers, therefore improving their social and environmental performance, increasing their income, and creating more stable livelihoods.

WiADF is a successful platform for women empowerment and participation within the food system. However, WiADF faces similar challenges such as managing power disparities with other groups, challenges of encouraging inclusive involvement and creating efficient communication and management procedures for partnerships to be successful. The challenge remains in bringing together participants to enhance sustainable agricultural product production, processing, and marketing, enhance product quality, and gain access to markets with higher average values. Whilst such organization as WiADF does not need to access land for farming, it however, may support to advocate for women participation within landowner groups dealings with agribusinesses.

4.8 Case Study # 8: Chingwan Rice Development

Chingwan Rice Development Cooperative (CRDC) was formed by a group of landowners and small farmers who pooled their resources and provided access to their customary land, and labor to produce commercial rice in partnership with Trukai Industries Ltd. Following the cooperative principles, the main purpose of CRDC was to share profit for their social welfare and well-being. They collaborated with Trukai Ltd and gained access to better markets, input supplies, and distribution channels and share the profits and risks associated with the business.

From the interviews a number of assumptions were notable. That the set-up of the cooperative was conflict potential, and this may not be communicated properly to the leadership. Therefore, with the inherent wide range of interests, disagreements may have easily developed over matters like decision-making, profit-sharing, and price fixing. These disputes may be challenging to settle and may cause internal strife and dysfunction. The other is restricted autonomy where the cooperatives were required to make these decisions jointly, however, when members appear not ready to give up some degree of autonomy either over their farming operations, marketing choices, and other business-related decisions problems do occur. And there is the problem of free-riders, where some members might not give their fair amount of support to the group or might benefit from it without giving something back. Resentment among the cooperative's contributing members may result from this, which would be detrimental to the overall operations of the enterprise.

Chingwan Rice Development Cooperative (CRDC) is successful model of landowner mobilization and partnership. Unfortunately, the typical cooperative pitfalls more common to cooperatives were probably overlooked resulting in the downfall of this promising venture between them and Trukai Industries Ltd.



4.9 Case Study # 9: Lutheran Services Development (LDS)

Lutheran Services Development (LDS) is a faith organization that participated in the delivery of services to improve the livelihood of people. It's participation in agriculture value and supply chain is to promote sustainable agriculture practices including food security for rural people in the communities. Its participation is subject to normal challenges of the value and supply chains and its partners which include; farmers, processors, traders, retailers, and consumers, work together to raise the value and supply chain's effectiveness, caliber, and sustainability. Partnerships in the supply chain may involve information exchange, the adoption of standards, infrastructure investment, and the promotion of social and environmental responsibility.

LDS is an entity of the Evangelical Lutheran Church of Papua New (ELC PNG). It was first established in 1986 by the first German Lutheran Missionary Rev. Johnna Frierl at Simbang in Finschaffen District, Morobe Province. Later the program office was brought to Malahang in Lae where it now operates. There are three main programs delivered through a holistic approach and with biblical principles which are; yangpela didiman, financial literacy, and infrastructure –water supply and sanitation facilities roll out to Lutheran network and other rural communities of the country. Agriculture is the core program that promotes sustainable agriculture practices including food security for rural people in the communities.

LDS is a successful model in agriculture using church non-government organizations model of participation. However, LDS may face related supply and value chain challenges experiences by many doing similar work. Those may include power imbalances, that of the dominance of larger, more powerful players over smaller, weaker ones, within its partnerships. Others would be dependency on partnerships becoming unduly dependent on one partner who may be the funder, buyer or processor. In most case, church run non-government organizations are restricted, as they rely on church and partner that may not have sufficient funds to support their work. It may also have partners from various cultural backgrounds, which could cause miscommunication and conflict. And finally, it may find that its work has minimal impact, that its partnerships may not always produce the desired results, which has a limited influence on enhancing farmers' livelihoods which is its core program of promoting sustainable agriculture practices including food security for rural people in the communities. Certainly, LDS stands in a better place to drive its Biblical teaching to educate landowners to unlock land for development, and to partner effectively with agribusiness.



4.10 Case Study #10: Fresh Produce Development Agency (FPDA)

Government-owned farms can help promote food security, provide employment, and support rural development. They can also prioritize environmental sustainability and social welfare, over profit. GoPNG however, does not own farms apart from Livestock Development Corporation (LDC). There are a number of provincial governments and district development authorities formed partnership with agribusiness. Government however facilitated development of agriculture in many different forms.

Fresh Produce Development Agency (FPDA) is a Government Organization responsible for facilitating the development of the horticulture and fresh produce industry from production to market. As a government entity, FPDA promotes government policies in food security, provide employment, and support rural development. They also prioritize environmental sustainability and social welfare, over profit. They also go through the challenges that government entities face in supporting the growth of agriculture and in this case horticulture in the country.

FPDA main aim is to develop a commercially and economically viable horticulture industry by increasing farmer productivity and improving relationships with traders and others in the food supply chain. It disseminates information, educates, and provides technical assistance to smallholder farmers in horticulture, and other related agriculture programs, as well, as supports relevant community-based livelihood programs. Currently has its head office in Goroka, Eastern Highlands Province, and operates in four other provinces; Mt Hagen, Western Highlands Province, Lae, Morobe Province, Port Moresby National Capital District, and Kokopo in East New Britain Province. Read more on: (https://fpda.com.pg/about-fpda). (https://vsa.org.nz/about-vsa/countryregion/papuanewguinea).

FPDA has a total workforce of 137 with 33 (24%) female staff. Few of those women are in leadership roles, with many being involved in the value chain process. FPDA work programs are diverse including 50% women and 50% men in all programs include; women and youth farm extension programs, capacity building and training programs on agriculture, and support are also provided to livelihood and family programs. FPDA rolled out its Village Extension Workers program targeting gender and youth population. FPDA programs are inclusive; men, women, youths, children, disabilities, widows, widowers, and orphans leaving no one behind in the communities for fresh produce programs.

FPDA is a successful government entity that is making inroads to support the development of the horticulture industry in the country. However, FPDA faces common challenges just like other government entities of similar nature. Whilst promoting landowner participation in agriculture together with development partners there are challenges that will continue to be difficult, for example, funding support, effective policy implementation, complex land tenure system, difficulty to determine ownership and establish clear property rights, lack of infrastructure and access to markets, which can make it difficult for farmers to transport and sell their products. Others include a lack of access to roads bridges, wharves and jetties, rural airstrips, and market facilities in rural areas. There is also a risk of political interference and a lack of incentives for innovation.

FPDA is also placed in the right place to advocate for landowner land access for agriculture development, as well promote effective partnership between landowners in their partnership with agribusiness.

4:11 Summary: The 10 case studies mentioned above demonstrate that each partnership in agriculture is distinct based on its business model and partnership condition. Partnership models undoubtedly have benefits and drawbacks, and people in charge of managing a partnership must be careful to manage it well, which includes resolving issues that are specific to the form of partnership they use. The demand to collaborate with landowners, however, will undoubtedly increase in the future. As a result, it looks that any partnership that wants to succeed in the future will need to find creative ways to work with landowners, for example, learning from so as to not repeating the experience of CRDC, and similar unfortunate situations of the past, but importantly gaining positive learnings from those and other players in the agriculture food system who has done well, such as the RAIL-VOP, HAS, NKW Fresh, and Agmark among others. Notable, is the support to grow local enterprises such as HAS, Takom Farm, Agmark, and many others. Likewise, additional support for RAIL-VOP and other of the same magnitude through road access, water supply, electrification, and among others conducive policies. Other important non-government partners in the value and supply chain such as WiADF, and LDS need to be properly supported so they find their rightful place. The government needs to do more in facilitating agriculture development through FPDA and the commodity boards, and they should continue to stay away from running farms, even setting up competing businesses.

However, continued government investment in public-private partnership to encourage growth in the sector is positive. Equally, the government should invest more into enabling infrastructure such as the construction of farm roads, irrigation, land reforms, electricity, telecommunication, access to credits, subsidy assistance, encouraging investments, establish proper governance structures to mediate problems, and above all seeking continuous innovation in developing the agriculture sector. Finally, it is obvious that the government should do more in protecting and encouraging growth of existing businesses, bring in new investors, and importantly establish governance mechanism to address problems between landowners and agribusiness enterprises who are in partnership to develop agriculture.

5.0 Key Findings

5.0 Key Findings

- □ 5.1 There are a number of agriculture partnership models in PNG. They can be categorized into family farms (subsistence farming, semi-commercial), corporate farms (semi-commercial and commercial farms), cooperative farms (cooperative societies), government-owned farms, and foreign-owned farms.
- □ 5.2 Agribusiness partnerships have a number of agriculture models. These are; supply chain partnerships, joint venture partnerships, out-growers, contract farming, and public-private partnership.
- □ 5.3 Smallholders partnering with agribusiness happen in a number of ways; value chain partnerships, farmer cooperatives, out-growers, contract farming, and aggregation centers.
- 5.4 Assorted models as reflected in this study are agribusiness models often mentioned in everyday languages. These are; Seed Multiplication and Distribution, Depot Model, Subsistence Model, Plantation Model, Nucleus Farming Model, Mini-Estate Model, Village Oil Palm, Semi-Commercial,
- □ 5.5 Corporate Farms, also known as commercial farms proved successful when they formed a partnership with landowners having direct access to benefit sharing.
- □ 5.6 Partnership that is not familiar with the management and leadership roles of their entities and the relationship of their entities to the partnership appears to face problems.
- 5.7 Corporate or commercial farms that have no clear partnership with landowners appear to have ongoing problems.
- □ 5.8 Government should form partnerships with agribusiness to promote economic growth through agriculture.
- □ 5.9 Government should do more in facilitating agriculture development through policies and funding support, and not get directly involved and compete against the private sector.
- □ 5.10 Partnerships that are not directly involved in farming but support agriculture platforms should be encouraged to do more to promote agriculture development.
- □ 5.11 Education around the different partnership models in the country is lacking and this needs to be addressed.
- 5.12 All partnership in agriculture is unique to their business model and partnership situation, however, one thing is obvious and that is for it to be successful one needs to partner with landowners and others within the agriculture food system.
- □ 5.13 Landowner's needs are increasingly complex, and they need to be managed in a smarter manner so that unnecessary demands are not placed on business, and disputes and disruptions are avoided.

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6.0 Recommendations

6.1 Managing partnerships between agribusiness and landowners is critical for the success of the partnership, and the overall investment. This means adhering to the agreement and keeping watch of the changing landscape of the environment locally and internationally one operates within.

6.2 For those who are etching new agreements, it would be of benefit to properly articulate the benefit-sharing mechanisms between the landowners. And those existing businesses who are in the process of review would be advised to properly articulate participation and benefit sharing in their review with the landowners.

6.3 Times have changed, and the models currently in existence that have landowner components need to be constantly checked and improved so they become relevant in this day and age. New models of partnership should always be sought so the business stays relevant and agile with the changing times.

6.4 Social Obligations of corporate farms should be explored to the fullest and expedited to the benefits of the partnership and the local community in which the business operates. Assistance should be sought from the government, civil society, and development partners to support the business partnership to perform those social responsibility provisions.

6.5 Leadership training for local landowners who hold leadership in incorporated land groups, cooperatives, associations, and small businesses is critical to assist them to provide leadership and management of their partnership with agribusiness, and others.

6.6 The form of a partnership agreement between landowner groups must be transparent to all parties to scrutinize at all times. Such a strong governance framework will play to benefit the corporation in doing agriculture in a responsible manner.

6.7 Government in partnership with agribusiness partners needs to set up a governance arbitration body to mediate problems by landowners, and others to protect the agribusiness investments for the benefit of all parties and the economic good of the country. This governance body may also lobby for government support to support agribusiness.

7.0 Conclusion

In conclusion, this study looked at 10 landowner and agribusiness partnerships that were active in the Markham Valley agriculture growth corridor, nine of which are still active, and one of which is no longer.

Over time, these agribusiness landowner cooperation models have changed, with some success stories and others that held great promise but ended in failure. As previously stated, many of the landowner partnership models used in the agricultural industry have not been well-researched or recorded in order to identify the causes of their successes or failures.

The ten case studies presented here are the first step in Grow PNG's attempt to uncover and explain the various types of landowner partnerships used in agribusiness, as well as their difficulties and successes. By doing this, Grow PNG hopes to inform and educate landowners and agribusiness players, and even in the long run influence policies that will direct current and future agricultural development with regard to landowner partnerships to grow agribusiness in the country.

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