

2017-2021 Mid-term Impact Assessment Report for Vietnam



Contents

List of acronyms.....	2
List of figures and tables.....	3
1. Executive summary.....	4
1.1 Overview of interventions.....	4
1.2 Overview of indicators.....	7
1.3 Summary of the main findings	14
1.3.1 Effectiveness.....	14
1.3.2 Relevance.....	14
1.3.3 Efficiency.....	15
1.3.4 Synergies and impacts	15
1.3.5 Lessons learnt	16
1.3.6 Exit strategy	18
2. Effectiveness analysis	18
2.1 Context	18
2.2 Effectiveness of the Rikolto intervention	20
2.2.1 Constraints.....	20
2.2.2 Programme strategies	20
2.2.3 Partners and staff	21
2.2.4 Result 1	21
2.2.5 Result 2	25
2.2.6 Conclusions.....	28
3. Relevance analysis.....	29
3.1 Overall assessment.....	29
3.2 Vegetable sector.....	30
3.3 Rice sector	36
3.4 Conclusion	42
4. Lessons learnt.....	42
5. Exit strategy.....	46
Annex 1: Suggested indicators and explanation for changes in target	49

List of acronyms

DARD	-	Department of Agriculture and Rural Development
FAO	-	UN Food and Agriculture Organization
GAP	-	Good Agricultural Practices
GIZ	-	German international cooperation, an arm of the German government
IFC	-	International Financial Corporation, a member of the World Bank Group
LTG	-	Loc Troi Group, an An Giang-based pesticide and rice trader joint-stock company
MARD	-	Ministry of Agriculture and Rural Development
NGO	-	Non-governmental organization
PGS	-	Participatory Guarantee System
SRP	-	Sustainable Rice Platform
VND	-	Vietnamese dong, monetary unit.

List of figures and tables

Figure 1. Overview of intervention - Vegetable programme	5
Figure 2. Overview of intervention - Rice programme.....	6
Table 1. Impact indicators	7
Table 2. Outcome indicators	10
Table 3. Comparison between expected results and actual achievement for vegetable sector - outcome level.....	22
Table 4. Comparison between expected results and actual achievement for rice sector - outcome level	25
Table 5. Comparison between expected results and actual achievement for vegetable sector - impact level	30
Table 6. Income changes compared to the baseline (VND/ha) – Vegetable sector.....	33
Table 7. Income changes compared to previous year by region - Vegetable sector	33
Table 8. Soil conservation practices by vegetable farmers	34
Table 9. Use of water by vegetable farmers.....	35
Table 10. Application of methods to avoid water contamination by vegetable farmers	35
Table 11. Comparison between expected results and actual achievement for rice sector - impact level	37
Table 12. Stubble management practices by rice farmers.....	39
Table 13. Straw management practices by rice farmers	40
Table 14. Weed management practices by rice farmers.....	40
Table 15. Insect management practices by rice farmers	41
Table 16. CO2 mitigation techniques by rice farmers	41
Table 17. Landscape management practices by rice farmers	41
Table 18. Action Plan.....	47

1. Executive summary

Rikolto Programme was planned for 5 years period implementation from 2017-2021 in two key areas: sustainable rice (in Phu Tho and An Giang provinces) and safe vegetables (Phu Tho, Vinh Phuc, Hanoi, Ha Nam, Da Nang). The plan was approved in April 2017. However, due to the delay in the project approval process in each province, the actual full programme implementation only started in November 2018, starting with An Giang in November 2017 and two provinces of Dong Thap and Vinh Phuc in November 2018¹. In Phu Tho, despite of partners' effort in facilitating the project approval process, the provincial authority did not support the project due to its different priorities, which are towards infrastructure investment and not on sustainable agriculture production.

Given serious delay in the approval process, by the end of 2019, the programme has achieved encouraging results that established a good foundation for acceleration in the remaining 2 years of the programme. Aiming at dynamic sustainable agriculture sector that brings economic benefit to smallholder producers, the programme has supported 680 farmer households, of which more than 400 farmer households applying Participatory Guarantee Systems (PGS) for safe vegetables and more than 200 farmer households have been trained in Sustainable Rice Platform practices. Rikolto's PGS success in Phu Tho has convinced Hanoi Plant Protection Department to implement PGS for selected cooperatives in Hanoi with the government budget. In An Giang and Dong Thap, proven economic gain and environmental sustainability of SRP rice demonstration has gained interest of farmers in the two provinces. Though achievement is still modest, initial market linkages for SRP rice produced by some farmers with private sector has created a momentum for scale-up in 2020. New fish-rice production model to cope with climate change impact in the Mekong delta has also attracted attention of farmers in flood areas and is finding its way to scale up due to high initial investment required. In Da Nang, Rikolto has introduced innovation on Food Smart City. A comprehensive research on Da Nang food system with concrete recommendations to develop a sustainable resilient food system for Da Nang has been acknowledged by Da Nang Food Safety Management Board, which paves ways to further cooperation to apply concrete measures on specific areas to improve food supply to the city, such as developing safe vegetables through applying PGS.

Level of achievements for safe vegetables and sustainable rice are presented in the overview of interventions (Figure 1 and Figure 2). Concrete achievement toward set target is presented in Table 3 (Vegetable) and Table 4 (Rice).

1.1 Overview of interventions

Graphical overviews of interventions are presented in Figure 1 and Figure 2. Below is the color code:

Changes in this intervention have surpassed expectations.
Changes in this intervention have met expectations.
Changes in this intervention did not fully meet expectations.
Changes in this intervention did not meet expectations.
This intervention was abandoned/not implemented.

¹ Project approvals in An Giang (Oct 2017), Hanoi (Mar 2018), Ha Nam (Apr 2018), Da Nang (May 2018), Vinh Phuc and Dong Thap (Oct 2018)

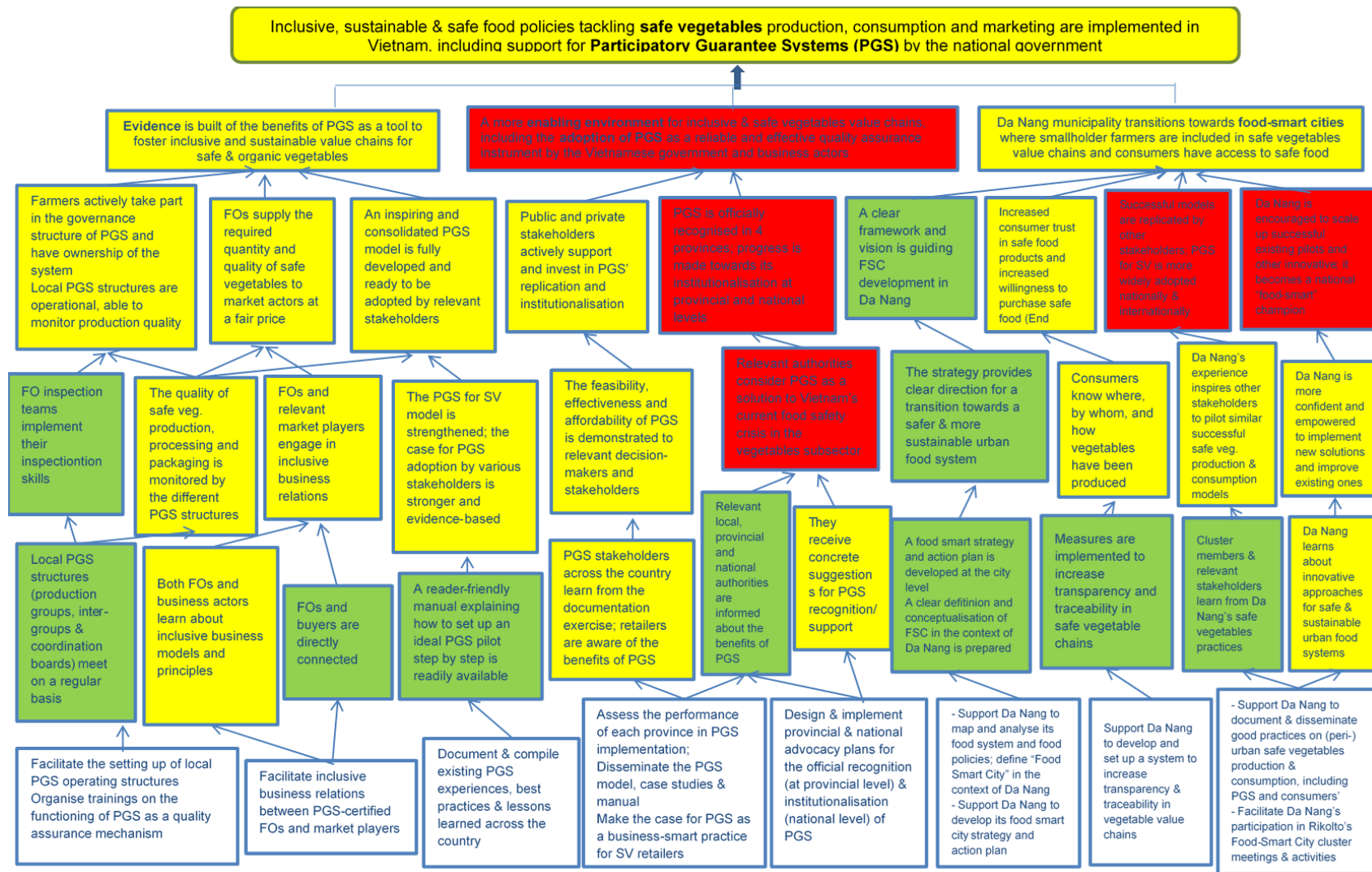


Figure 1. Overview of intervention - Vegetable programme



Figure 2. Overview of intervention - Rice programme

1.2 Overview of indicators

Table 1. Impact indicators

Indicator	2017 (baseline) (original FOs)	2019 observed value (original FOs and new FOs)	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
Specific objective: Fruits, vegetables, and rice in Vietnam are produced in safe and sustainable ways and marketed through viable, competitive and efficient chains benefitting smallholder producers						
Indicator 1: # beneficiaries						
Fresh fruits and vegetables 09 surveyed FOs in 2017: Tu Xa, Trac Van, Cat Lai, An Hoa, Thanh Ha, Van Hoi Xanh, La Huong, Ninh An & Tuy Loan 04 new FOs in 2019: Thanh Son, Dang Xa, Yen My & Tien Le	81 (65F/16M/5Y)	446 257F/189M/18Y)	650	1100	980	The baseline value (81) includes only Tu Xa and Trac Van. In 2016, we planned to work with several other FOs: Tu Vu (in Phu Tho), Van Hoi Xanh, An Hoa, Thanh Ha (in Vinh Phuc), La Huong, Tuy Loan, Ninh An (in Da Nang). However, as Phu Tho did not approve our project and other provinces (Vinh Phuc & Da Nang) approved the project late, we adjusted the baseline value (548 originally) and the target for 2021 accordingly.
Rice 01 initial FO (in An Giang): Tan Loi 05 new FOs: Tan Loi 2 (in An Giang), Tan Binh, Binh Thanh, Binh Hoa and Thang Loi (in Dong Thap)	0	238 (23F/215M/14Y)	3500	5400	1700	For the baseline value, it is 0 instead of the original figure 800 because Phu Tho didn't approve our project and An Giang joined the project late then.
Indicator 2: Share of total household income derived from the sales of safe/sustainable fresh fruits & vegetables and rice						
Fresh fruits and vegetables	55.7%	59.1%	50%	60%	60%	

Indicator		2017 (baseline) (original FOs)	2019 observed value (original FOs and new FOs)	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
Rice		88.2%	77.8%	60%	70%	80%	
Indicator 3: Sustainable production index							The original targets were set after the baseline survey in 2017.
Fresh fruits and vegetables							
	Soil conservation	2.20	1.25	2.5	2.8	2.5	
	Water management	1.24	0.54	2.0	2.7	2.3	
	Resource management	1.86	1.61	2.2	2.55	2.3	
	Climate change	0.91	1.21	1.3	2.4	2.0	
	Biodiversity	1.61	1.67	1.8	2.4	2.0	
	Landscape management	0.73	0.71	1.2	2.1	1.0	
Rice							
	Soil conservation	1.09	1.76	2.0	2.5	2.2	
	Water management	1.59	2.14	2.3	2.6	2.6	
	Resource management	1.65	1.53	2.3	2.7	2.5	
	Climate change	1.42	1.65	2.0	2.4	2.2	

Indicator		2017 (baseline) (original FOs)	2019 observed value (original FOs and new FOs)	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
	Biodiversity	0.86	0.79	1.6	2.0	1.6	
	Landscape management	1.36	0.04	1.5	2.0	1.5	
Indicator 4: # indirect end beneficiaries							
Fresh fruits and vegetables							
	# producers and consumers that are reasonably affected by changes in public and private policies	0	0	1,000,000	2,000,000	2,000,000	
	# household members [= # quality food producers * (average household size – 1)]	243 1568	1361	1860	3146	1560	As the number of direct end beneficiaries for 2017 and 2021 is adjusted above, the corresponding number of indirect beneficiaries also changes.
	# SOFF downloads	1588	-	10,000	30,000	Indicator removed	Abandoned intervention
Rice							
	# household members [= # quality food producers * (average household size – 1)]	0 2288	738	10,010	15,444	6,000	As the number of direct end beneficiaries for 2017 and 2021 is adjusted above, the corresponding number of indirect beneficiaries also changes.

Table 2. Outcome indicators

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
Specific objective: Fruits, vegetables, and rice in Vietnam are produced in safe and sustainable ways and marketed through viable, competitive and efficient chains benefitting smallholder producers						
Result 1: Inclusive, sustainable & safe food policies tackling safe vegetables production, consumption and marketing are implemented in Vietnam, including support for Participatory Guarantee Systems by the national government						
Indicator 1: Number of provinces that officially recognise PGS	0	1	1	4	4	
Indicator 2: Number of expressions of support in favour of PGS (as evidenced by speeches, official documents, interviews, support to local PGS models, etc.) (cumulative)	1	4	7	15	Indicator removed	We removed this indicator because the ultimate goal is to have PGS recognised by the province, which is measured by indicator 1. Moreover, this indicator does not make a lot of sense when measuring the process of institutionalizing PGS.
Indicator 3: Total area used for growing PGS-certified fresh fruits & vegetables in the selected provinces	4.7	52.14	30	70	70	
Indicator 4: Volume of PGS vegetables (tons) sold to markets (both individually and through FO) (tons/year)	403	4420	2500	4000	8500	"PGS vegetables" means PGS-controlled vegetables. At this moment, the buyers do not require PGS certification but they need farmers to produce vegetables in a safe way.
Indicator 5.1: Number of policy recommendations formulated by the multi-stakeholder platform on safe vegetables that have been	0	0	2	2	Indicator removed	Rikolto discussed with its partners about the formation of a PGS safe vegetable network. We concluded that

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
followed by the national government (cumulative)						within a 5 year-programme, advocating PGS to be recognised at national level is not feasible. The workable structure would be a provincial PGS coordination board.
Indicator 5.2: Number of policy recommendations made by Rikolto in Vietnam that are followed through by the multi-stakeholder platform on safe vegetables	0	0	2	2	Indicator removed	
Indicator 6.1: Number of practices from FSC cluster replicated in Vietnam	0	0	2	4	Indicator removed	The context is different from country to country. It's not easy to replicate a practice of one country in the others.
Indicator 6.2: Number of publications about Da Nang's food-smart practices (in total – cumulative)	0	2	3	10	10	
Indicator 6.3: Number of actions from FSC cluster members that are inspired by Da Nang's practices	0	0	0	2	Indicator removed	The context is different from country to country. It's not easy to replicate a practice of one country in the others.
Indicator 6.4: Number of policies that improve the enabling environment for inclusive safe vegetables/food production, marketing and consumption in Da Nang (cumulative)	0	0	1	2	Indicator removed	This indicator is included in indicator 1 (Number of provinces have officially recognised PGS)
Result 2: Inclusive business models and sustainability standards are successfully scaled up and mainstreamed throughout the Vietnamese rice subsector						
Indicator 1: Number of metric tons of rice per farmer sold via farmer organisations to buyers (total volume sold by FO/number of	0	34	6	12	Indicator removed	After intervening deeper in the Mekong Delta, we have learnt that it doesn't make sense to measure the average

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
farmers)						volume of rice that a farmer sells through the farmer organisation. The farmers only commercialize their rice through the FOs only when they have a contract with the company (if the company requests). Also, the majority of the income of the cooperatives there comes from their provision of agricultural services.
Indicator 2: Average income per ha from the sale of rice (VND/ha)	77.84 million	79.4 million	115 million	130 million	Indicator removed	We have learnt that the farmers cultivate different varieties and that the prices fluctuate. Therefore, it doesn't make sense to measure the average income.
Indicator 3: Number of farmers (F/M/Y) selling through long-term trading agreements	0	3 (OF/3M/OY)	500	1500	1500	New indicator to replace: Number of farmers (F/M/Y) selling SRP-compliant rice to companies
Indicator 4: Number of farmer organizations in the target provinces that are involved in a sustainable partnership with private companies	-	-	-	-	-	Officially removed since 2018
Indicator 5: Quantity of PGS rice sold on the domestic market (tons/year)	0	0	200	400	Indicator removed	We removed this indicator because we cannot tell on which market the rice would be sold.

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target	2021 adjusted target (after 2019 review)	Notes
Indicator 6: Number of rice companies that have adopted inclusive business approaches in their business model	0	0	2	4	2	
Indicator 7: Number of policies (new or adapted) that support more inclusive business relations in the rice subsector	0	0	1	2	2	
Indicator 8.1: Number of publications (blogs, web articles, brochures, case studies, etc.) on PGS for SRP-rice (cumulative)	0	0	4	10	10	
Indicator 8.2: An implementation guide on how to set up PGS for SRP-rice is developed (0 = no implementation guide, 1 = in development, 2 = available, 3 = available and up to date)	0	0	1	2	2	

1.3 Summary of the main findings

1.3.1 Effectiveness

Given the situation of factors, both exogenous of local context and endogenous of programme, satisfactory progress has been made in the project. The programme has set a good foundation to achieve its expected results. The programme was designed with assessment and implementation of pilots to prove an innovation in the agriculture sector, followed by scale-up thanks to facilitating inclusive business model as well as enabling environment, which normally takes time to move from one stage to the next. With the actual implementation period of less than 3.5 years, the target set by the programme is far too ambitious. By the end of 2018, the programme suggested to adjust the target for its outcome indicators to make it more realistic. With the revised target set by the programme, it is likely that the programme will achieve the revised set target by the end of 2021. However, there are some weaknesses in the design and implementation, which will be addressed in the lessons learnt and exit strategy to ensure sustainability and impact of the programme.

1.3.2 Relevance

Rikolto programme on vegetables has addressed the food safety issues, which is the most pressing issue reported by consumers since 2017 according to a survey by Indochina Research in Vietnam in 2019. The consumers' concerns related to food safety include chemicals, pesticides and antibiotics residuals, and biological contamination. The foodborne disease data in 2018 reported 97 cases, with 3340 people infected, of which 2944 hospitalized and 16 death. In 2019, Vietnam recorded 76 cases of foodborne disease with almost 2000 people infected, of which 1918 hospitalized and 8 death². Government has put safe and healthy (organic) food in its agenda, up to the National Assembly level. Although it constitutes a small fraction of agriculture, the organic products have become important parts for economy of Vietnam. Promoting safe and organic food production, Rikolto's program is of high relevance in all target provinces, especially under food system lenses where big cities are increasing dependence on safe vegetables from other provinces.

Rice production with high level use of water, pesticides and fertilizers has largely contribute to greenhouse gas emission, which is negatively impact the environment. The rice sector is under restructuring programme led by the government, in which the area for rice production will be reduced from 4.3 million ha to 3-3.2 million ha in 2030 and rice production will be shifted toward high quality varieties which apply sustainable agriculture practices. Rikolto programme on sustainable rice production through promoting SRP application and facilitating market linkages is highly relevant and aligned with government priorities and it contributes to mitigate negative impact to the environment. Furthermore, due to climate change impact, the Mekong delta has increasingly faced saline water intrusion in the coastal areas while irregular flood and drought have affected livelihood of millions of farmers in the upper region of the Mekong delta. The intervention on sustainable rice has also addressed the short of water in the Mekong and provided alternative model such as fish-rice for the farmers to cope with flood season.

Through strategic intervention in safe vegetables and sustainable rice, Rikolto programme has addressed sustainability from economic, social and environmental perspectives. The programme has facilitated inclusive business models, in which smallholder farmers have gained market access for

² <https://www.vietnamplus.vn/thu-tuong-khong-nhan-nhuong-voi-hanh-vi-vi-pham-an-toan-thuc-pham/617974.vnp>

their products thanks to their sustainable production, which resulted in either higher sale price or saving agriculture input investment. Examples for higher price generated from collectively selling are Tien Le and La Huong (47%), Van Hoi (19%), Dang Xa (8%). Members of these FOs prefer selling vegetable collectively so that they can have more time for another work and these are stable selling channels. In safe vegetable sub-sector, more than 57% of the total benefited farmers are women, strengthening their position in the value chain. In the rice sector, assessment on women's role in the sector has been carried out. However, strategy and action plan remain to be developed and executed.

To conclude, Rikolto programme has promoted inclusive, fair and sustainable growth, which is highly contributed to the first strategic goal in the JSF. The programme's objectives are aligned with priorities of the sector in Vietnam. Interventions and outputs are consistent with intended impact.

1.3.3 Efficiency

Under the circumstances of project implementation with serious delay, the programme is assessed as satisfactory. The stretching of limited resources to many provinces, working through large number of partners, of which many are new, is the main reason for not achieving efficiency in the first half of the programme. Investment in building partnership and field evidence has been the priorities in the last years and it has resulted in strong foundation for the programme to take off when designing priorities for the remaining 2 years. Despite the limited achievement in the target indicators, increasing efficiency has been observed along the years from 2017 through 2019 in both strategic areas of intervention. In vegetable programme, the adoption of PGS by Hanoi Department of Agriculture and Rural Development in December 2019 marked the first officialization of PGS for safe vegetable by a Governmental body, which allowed the application of PGS as a quality assurance measure for agricultural produces in Hanoi. This will create synergies and leverage limited resources from Rikolto and will create impact in Hanoi in the long run. In the rice sector, pilot has proven the economic return that farmers gain when applying SRP of more than 100 Euro/ha/crop season besides other benefit from reduction of GHG emission. This investment will get return in the remaining years through Rikolto's facilitating further market linkages and hence, farmers' adoption of SRP practice will increase and sustain.

1.3.4 Synergies and impacts

As a small player compared to others in Vietnam, such as GIZ and Oxfam in the rice sector, or with the government in safe vegetables in Hanoi, Rikolto has gained trust of the partners including to provide technical expertise to the Hanoi Plant Protection Department and supporting them in developing PGS guidelines for further scaling up in the coming years with the government budget. Expertise on food system and food safety has been recognized by the World Bank and has been mobilized to carry out a study for their further investment in food safety in Vietnam. With limited resources, Rikolto programme has been able to leverage its investment with others in the two sub-sectors to create synergies. Experiences from FSC in Da Nang have been shared internationally expecting to inspire others in developing such comprehensive approach in addressing issues in their food system. In the rice sector, discussion with GIZ and Oxfam is ongoing to put joint effort in further bringing SRP to the agenda of the Public Private Partnership Agenda, advocating towards National Chapter on SRP signed by all PPP members. The Rikolto programme in Vietnam have also

collaborated with academics from University of Ghent, University of Louvain, Belgium in supporting research activities such as PGS and market studies in safe vegetables.

1.3.5 Lessons learnt

The Vietnam programme offers some lessons learnt that include programme design, setting priorities, choosing partners, Rikolto's role and investment in inclusive business.

Programme design: With limited resources³, the programme was designed to be implemented in 6 provinces and to work with 12 partners, which have stretched both financial and human resources as well as coordination and management requirements. This strategy designed at the first place aims to reduce the risk of PGS piloting. However, such strategy is found not suitable under limited financial resources and short time frame. Furthermore, many provinces and partners are new, which needs time to build partnership and planning for the implementation. Though, concrete foundation has been achieved, further prioritisation to narrowing down the provinces as well as partners will be carried out in 2020.

The programme design did not take into account the administrative procedures and bureaucracy of the system, leading to an over optimistic planning of the achievement for a 5-year programme which ends up in a less than 3.5-year programme.

The programme has developed too many indicators. Many are not focusing on results that make it costly to monitor. Not all indicators correctly reflect the situation on the ground and the results of planned interventions, which did not help reflecting the programme intervention based on these indicators. Furthermore, the set targets are too ambitious. Suggestion to replace some indicators by others that reflected the intervention areas will be presented in Annex 1. Revision of target will also be presented.

Intervention strategies: To make contribution to systemic changes, the programme has designed strategies that address technical issues at production, inclusive business and policy influencing. The strategies aimed at changing farmers' practices, farmer organization strengthening, private sector adopting inclusive business model, the government has better policies and invests more to the sustainable production and increasing consumers awareness and knowledge on safe food as well as their right to access to safe food. Though the target groups as all actors related to value chain and environment are selected as the right approach, concrete target towards consumers was not properly selected. With the step wise approach from building evidence to policy influencing, immediately addressing the issues from the consumer end as a general target group is too costly and the programme at the end couldn't afford it. The programme will leave this ambition of advocating for consumers' right but will contribute to awareness raising activities on safe vegetables and sustainable rice production in joint effort with others when opportunities arise.

The advocacy for PGS at the national level through PGS networks is not the best strategy, especially when the provincial networks haven't shown concrete results at policy influencing at the provincial level. In the remaining two years, effort on policies influencing will be put on provinces where concrete positive results have been achieved. At the national level, we will work in collaboration with

³ Total of 1,739,038 Euro, of which 56.11% (929,320.88 Euro) for programme intervention in 5 years

other development partners and make contribution based on our success at the provincial level when opportunities arise.

FSC strategy for Da Nang has been recommended to Da Nang authorities, however having a strategy developed and approved by the government with budget allocation requires political commitment at provincial level. With priorities on services and tourism, while more than 90% of agriculture products are “imported” from other provinces, before a comprehensive strategy is adopted with budget, the programme will identify some entry points to work with the government to address larger issues on food safety in combination with inclusive business model of safe vegetables.

Selection of partners: Though target beneficiaries are farmers and farmer organisation, the programme strategies are technical support, market facilitation and enabling environment, in which FU is not the best choice to help making necessary changes. In Vinh Phuc and An Giang, FU has been proven not the right partners. With technical intervention on the ground, technical department in target province is the most appropriate partner for project implementation. They are also the right partner to move forward with policies recommendation and can trigger systemic change.

Committed partners toward sustainable production have largely contributed to the success of the programme. In Hanoi, the partner has relied on technical expertise from Rikolto to support in developing PGS technical guidelines, which is then adopted by PPD to implement widely in different districts in Hanoi. This high commitment from PPD and increasing ownership in addressing food safety issues in Hanoi is crucial for the scale-up, sustainability and impact in the coming years. In the rice sector, commitment of the Department of Agriculture and Rural Development in Dong Thap has contributed largely in the results of SRP demonstration and market facilitation with company. Though the results in the rice sector are modest, its momentum will help speeding up in the SRP application in the remaining 2 years of the programme.

Private sector engagement can be powerful to have large impact. However, real commitment in sustainability is hard to find in the rice sector when rice is traded as commodities. Big companies are interested in putting up the images rather than seriously investing in sustainable products. It is therefore very challenging to identify the right company that can actually make the impact. In the vegetable sector, though enterprises interested in safe products are found, the volume traded is limited. Policy influencing safe food is the way to move forward, however it will take much longer time to change. Combination of both market intervention and policy influencing will be the focus in our exit strategies.

Rikolto’s role in inclusive business: Working through partners is the strategy of Rikolto’s programme 2017-2021. Though this is the right strategy, it is found that the partners haven’t got the right capacity and mandate to work on inclusive business and facilitating market linkages. Besides, there is low interest of private sector in safe products as correctly assessed in the risk assessment at the programme planning stage, it is very challenging to facilitate market linkages with designed intervention through partner organization. Deepening involvement of Rikolto in inclusive business model, together with partners and farmer groups, to identify the right enterprises will make market linkages for safe products more strengthened, which contributes to the sustainability of the programme.

1.3.6 Exit strategy

For project partners to maintain or sustain project outcomes, taking into account the limited time and financial resources of the programme and constraints as analysed earlier, revised target indicators are presented in Annex 1 of this report. In the remaining two years of programme, Rikolto will prioritize its intervention strategies, focusing on where efficiencies are mostly assessed. In vegetable programme, Rikolto will consolidate its success in scaling up in Hanoi by leveraging investment with Hanoi PPD through full PGS guidelines and manuals adopted and implemented by Hanoi PPD using government budget. Lessons learnt from Hanoi DARD on PGS will be consolidated to share with other provinces primarily in Vinh Phuc, Ha Nam, Da Nang. Strengthening inclusive business model to increase its impact on market access for safe vegetables and sustainable rice to have impact to farmer organisations will be our focus. As Hanoi also imports its food from neighbouring provinces including Vinh Phuc, inclusive business model on safe vegetables for farmers in Vinh Phuc and Hanoi will be assessed, gearing toward Food City Region approach. In Vinh Phuc, advocating to integrate PGS into provincial application from 2021 will be put further effort in 2020, aiming at adoption of PGS either officially or unofficially by the government, providing they use their government budget to roll out, while Rikolto's role will be to develop technical guidelines and manual plus organise TOT training for partners.

FSC initiatives in Da Nang has inspired the Food Safety Management Authority (FSMA) to explore further to collaborate with Rikolto in addressing food "import" from other provinces, food supply to schools and public kitchen. Quite a number of ideas have been presented by FSMB. However, with such ambition, Rikolto will work together with the partners in Da Nang to look for further support in addressing these issues. With limited budget from the current programme, Rikolto will continue to facilitate inclusive business model for farmer organization producing safe vegetables. The right pilot on this inclusive business model will open an opportunity for further expansion in Da Nang and other cities.

In the rice sector, effort will be invested in actual application of SRP in larger scale and quality through improving market linkages and incentives for higher SRP scores. Partnership with development partners such as GIZ and Oxfam will be lifted up from discussion to actual effort in engaging private and public sector under PPP in rice, moving towards an agreed National Chapter signed by all members in the PPP. Besides, action on gender and youth will be materialized. Further engagement of other enterprises who are committed to SRP will be explored, both for export and domestic markets. Collaboration with FAO started by the end of 2019 in providing recommendations and suggestions for their future involvement in SRP rice as well as alternative models such as fish-rice, duck-rice hopefully will be resulted in further effort of FAO together with Rikolto in the rice sector, not only in Vietnam but also at the international level.

2. Effectiveness analysis

2.1 Context

Approved by DGD in April 2017, the programme started its detail design of project implementation with all partners in the target provinces. Unfortunately, the whole process took much more time than anticipated for many reasons including partners' different priorities as in the case of Phu Tho, where

the government was more interested in infrastructure, which is not in the framework of Rikolto's programme⁴. In other cases, where Rikolto didn't have the activities earlier, approval from central government for Rikolto to expand its working areas took very long time⁵. Official project approval for An Giang was issued in Oct 2017, followed by Hanoi in Mar 2018, Ha Nam – Apr 2018, Da Nang - May 2019 and Vinh Phuc and Dong Thap in Oct 2018⁶. With the changes in the target provinces, the withdrawal of Phu Tho from the original programme design (from June 2018), and the new provinces and target groups coming into the programme at different point in time, baseline data only reflects the situation of farmer groups that joined the project at early stage. By the end of 2019, the programme has been implemented in all target provinces for about 1.5 years.

In Viet Nam, Rikolto program supports farmers and their organization in various activities⁷ primarily on two focus crops: fresh fruit and vegetable (FFV) in the Red river delta (Ha Nam, Phu Tho, Vinh Phuc provinces, and Hanoi) and in Centre (Da Nang city) and rice in the Mekong Delta (An Giang and Dong Thap Provinces).

Rikolto facilitates the process of **product quality assurance**, compliance with sustainability and food safety standards, and the acquisition of low-cost certification. In the vegetables sub-sector, Rikolto supports farmers' organizations to set up **Participatory Guarantee Systems** to monitor and certify compliance with either a food safety (BasicGAP) or Organic standard (PGS Vietnam).

Rikolto's rice program named "Development of Sustainable and Inclusive Rice Value Chain for smallholder producers in Vietnam" situates in two provinces of the Mekong delta: An Giang and Dong Thap. By the end of 2017, the first farmers' group (Tan Loi 1) in Tri Ton District (An Giang province) was supported. In the following years, the program expands to other cooperatives in Dong Thap province. Being a Board' member of Sustainable Rice Platform (SRP), Rikolto in Vietnam promotes SRP standards using PGS approach as a testing scheme.

Rikolto supports the development of farmer organizations into **business farmer organizations**. Using "**Scope Insight**" to assess the level of professionalization of farmer organizations, and, based on this, it designs the most relevant training plan for each organization that include business and financial management, bookkeeping, effective leadership, marketing. Opportunities are created for farmers to participate in hands-on training sessions, farmer-to-farmer visits and product exhibits. The farmers and farmer organizations are assisted in **developing fair business partnerships** with private actors that are interested in sourcing directly from them. Rikolto strives to make the case for **inclusive business models** and relationships and support both companies and farmer organizations to make steps towards this goal.

Rikolto promotes and helps implement **alternative farming approaches** that are more sustainable and climate-friendly. The approaches include sustainable agriculture, organic farming, and climate-smart agriculture. Innovative and participatory methodologies are used to teach these approaches.

⁴ In June 2018, Phu Tho provincial government officially refused the project

⁵ Rikolto's permit to work in Dong Thap (replace Phu Tho) in October 2018

⁶ An Giang and Dong Thap: target provinces for sustainable rice and the rest are supported for safe vegetables

⁷ <https://vietnam.rikolto.org/en/about-us/main-activities>

2.2 Effectiveness of the Rikolto intervention

In this section, progress towards programme designed outcomes is reviewed, on the basis of which the effectiveness of the programme is assessed, including the quality of outputs. Major factors influencing the achievement or nonachievement will be addressed.

2.2.1 Constraints

The programme is implemented in 6 provinces, spreading out in 3 regions in Vietnam including the Red River delta, the centre and the Mekong delta and working in the two key sectors: vegetables and rice. With more than 12 partners, the programme has stretched its limited financial, human and time resources in getting approval, developing plans with each partner, coordinating, providing technical expertise and managing for results. Improvement in value chain with inclusive business facilitation normally takes years to show sustainable results. Although the approach of working through partners helps to increase ownership and has a larger impact, the quality of the work varies significantly depending on the partner's capacity. The role as a facilitator to bring stakeholders, including the private sector, in the whole process has been challenged due to such large coverage.

As mentioned in the context, the programme faced serious delay in getting approval from all provinces due to lengthy and bureaucratic approval procedures. The programme was approved by the donor in April 2017, but the implementation only started in Oct 2017 in one province and full programme implementation is only in December 2018. This gives programme only 1.5 years to implement by the time of this midterm review.

There exist some gaps between the programme and the government priorities, leading to lengthy discussion during planning. In the case of Phu Tho, changing priorities of the government after programme is approved from Rikolto side led to the failure in continued partnership. This has serious effect to the target set by the programme due to the different context of Phu Tho and the alternative option (Dong Thap), which will be discussed in detail later in the rice programme.

2.2.2 Programme strategies

The programme is designed following 3 key strategies:

- (i) strengthening partner capacities for collective actions by improving farmer organisations' technical, organisational and business skills, facilitating market linkages between chain actors, and supporting key players in unlocking the potential of a critical mass of farmers;
- (ii) fostering innovation by investing in innovative methodologies to promote new inclusive & sustainable business models and using technology to link consumers with safe food markets, i.e. through the Safe & Organic Food Finder.
- (iii) supporting an enabling environment for Vietnamese smallholders and creating/reinforcing sustainability alliances and platforms.

The programme implementation is based on building blocks from forming evidence through concrete actions and to mobilise that evidence to convince stakeholders (mainly private actors & the government) to take up innovative practices and models. This strategy, together with working through partners will create synergy when the right partners with high commitments are selected. However, it takes time for the programme to build evidence, document them and share before achieving results on enabling environment. In the rice sector, innovation on both SRP and PGS has its

evidences to build in which PGS can only start after the uptake of SRP. This approach takes time to show results.

2.2.3 Partners and staff

Besides the large number of partners as mentioned above, the programme has worked with diverse partners, from technical departments such as plant protection department, quality assurance department, to mass organization such as farmer union, and also with local NGO such as DANUSTA. Strategic partners are not well defined leading to unclear strategy on how evidence built by different partners is used to feed into enabling environment facilitation. Hanoi is the case where support is much focused and strategic partnership was identified and followed closely.

In general, the partnership with public sector has been good. Though work plan development and adjustment take more time than anticipated, the technical trainings meet expected quality. The partnership with technical government agencies such as PPD has created a solid path for influencing over policy and practice with high potential for scale up and long-term sustainability, especially in Hanoi. However, other activities related to market facilitation remain modest, especially when implemented by mass organization and local NGO.

Partnership with private sector is less visible as the results of working through partners, who do not have the mandate and capacity to work on inclusive business. There are some levels of engagement of formal private sector in the rice sector through initial contract for SRP rice, and some collective sale to modern retail such as Vinmart. However, this intervention line could have been improved.

Rikolto team, with its concrete experiences in the field, has shown its flexibility and willingness to adapt to changing context, revise indicators and budgets, exploring new partners in new provinces when being rejected in Phu Tho. Rikolto staff has built a good relationship with the partners in target provinces and provided support to partners when required. However, the lack of inclusive business expert/programme officer, who has a solid background and experience in agribusiness, marketing, and value chain as well as business development has hampered the progress in this intervention line.

2.2.4 Result 1

The first result aimed at an inclusive, sustainable & safe food policies tackling safe vegetables production, consumption and marketing are implemented in Vietnam, including support for Participatory Guarantee Systems by the national government.

The programme designed with 4 intervention lines with (1) build evidence on the benefit of PGS and foster the inclusive and sustainable safe vegetable value chains; (2) improve a more enabling policy environment for inclusive and safe vegetables in Vietnam; (3) Support Da Nang & Hanoi to transition towards food-smart cities where smallholder farmers are included in safe vegetables value chains and consumers have easy access to safe food and (4) Build the capacity of consumer protection organisations (CPOs) to better represent consumers on matters related to food safety.

The intended results by midterm are presented in Table 3, in which actual achievement has also been presented.

Table 3. Comparison between expected results and actual achievement for vegetable sector - outcome level

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target
Result 1: Inclusive, sustainable & safe food policies tackling safe vegetables production, consumption and marketing are implemented in Vietnam, including support for Participatory Guarantee Systems by the national government				
Indicator 1: Number of provinces that officially recognise PGS	0	1	1	4
Indicator 3: Total area used for growing PGS-certified fresh fruits & vegetables in the selected provinces	4.7	52.14	30	70
Indicator 4: Volume of PGS vegetables (tons) sold to markets (both individually and through FO) (tons/year)	403	4420	2500	4000
Indicator 6.1: Number of publications about Da Nang's food-smart practices (in total – cumulative)	0	2	3	10

Given the delay of the programme for more than 1.5 years, the programme is assessed as sufficiently effective. Focus has been put **on evidence building** in the first years of the programme implementation in both technical and market linkage aspects. This area of intervention is assessed as the most effective in the whole programme and it has contributed to the transformation of the sector. Training has been organized for farmers and cooperative leaders to strengthen their organization as well as improvement of sustainable farming practices. PGS was set up and put in practices for 13 cooperatives; total areas of safe vegetable production almost double the target set by the programme, which is a very positive result.

The safe vegetables produced were tested to bring concrete evidence to the farmers, business, consumers and government about the feasibility and effectiveness of the PGS tools. Exchange, cross learning and facilitating buyers and consumers visiting the model and engaging in monitoring have been organized to build trust. Improved capacity of some cooperatives has resulted in more collective sales such as in An Hoa and Tien Le, respectively 100% and 50%. However, in other cooperatives, e.g. Yen My and Thanh Son, as the capacity of the leaders has not been lifted up to the next level, collective sale is not well organized. Identifying large buyers remain a challenge and farmers in these cooperatives prefer to sell their vegetables individually, some sell in the wet market for higher price. For example, farmers in Yen My or Thanh Son bring their vegetable to a wet market nearby, spending a morning there to enjoy about 15% higher price. Farmers in these areas have more time so they prefer this way of selling as they are close to the markets. Overall, farmers get a higher share of their total income from safe vegetables (reached 59% compared to 50% set at target). The programme will invest further in exploring potential enterprises to facilitate inclusive business model for safe vegetables to scale up and making it more sustainable.

Improve **enabling environment** has been paid attention in the vegetable programme, with higher effectiveness in Hanoi, where PGS toolbox has been adopted by Hanoi PPD and will be applied widely with government budget. With the earlier momentum of Hanoi PPD in piloting PGS with focus on logbook keeping and chemical control, since 2018, Hanoi Department of Agriculture and Rural Development (DARD) started to pilot PGS among vegetable smallholders in three districts of Hanoi in a more systematic way with strong support from Rikolto. Ambition to improve enabling environment in all 4 provinces, where the vegetable programme is working, is far too ambitious. With limited resources of the programme and the delay in the implementation, having impact at policy level even at provincial government is an over optimistic assumption from the first place.

Food Smart City cluster is a setting amongst Rikolto regions. It promotes learning and sharing of the best food related initiatives/pilots. In June 2018, Da Nang government approved a research titled “Analysing Food Value Chain and Developing Food Smart City by 2025 with vision to 2030” funded by the Belgian Study and Consultancy Fund (SCF). The research was conducted by Rikolto in cooperation with the Vietnam University of Agriculture (VNUA). In early 2019, based on the results, a strategy that included objectives and corresponding action plans was formulated in a multi-stakeholder workshop organized by Rikolto and Da Nang Food Safety Management Authority. Together with intervention on safe vegetable production under PGS scheme and inclusive business facilitation in Da Nang, the PGS application is expected to expand when market linkages are strengthened, which will be the focus in the remaining 2 years of the programme. The idea of developing sustainable food systems for urban using the concept of FSC inspired other development partners. World Bank has partnered with Rikolto, VNUA, CIAT and the Asian Foundation to carry out a rapid diagnostic assessment of the food system and food safety hazards in the cities of Hanoi and Ho Chi Minh city. At the international level, the formulation of food smart city strategy in Da Nang has inspired other cities which shared similar concerns regarding its food system, namely highly dependent on external supplies and food safety issues. Concrete measures to address a sustainable food system remain a long journey with lots of challenges for both government and its partners and it requires long term commitments especially from the government to achieve transformation.

In Hanoi, besides effort in promoting PGS for further expansion by the government, three dimensions of food system including availability, accessibility and affordability are studied in the wet

market to understand how food system impacts nutrition and health of consumers, especially in poor districts in Hanoi regarding their consumption in fruits and vegetables. Based on the study, innovations to improve fruits and vegetables consumption will be tested in the wet market. This work is co-funded by the Bill and Melinda Gates Foundation. Rikolto Vietnam is working in partnership with CIAT, NIN, IFPRI and HMU to find solution for improving nutrition and health of urban poor in Hanoi. The applied research will contribute to identify suitable intervention to improve sustainable food system and ensure that livelihood of urban poor will be properly addressed, which is one of the strategies to address in food smart city options.

Another intervention area, that has not produced expected results, is the intervention at the downstream of the safe vegetable value chain, including the capacity building for **consumer protection organization** and the investment in the **Safe and Organic Food Finder in Hanoi (SOFF)**.

Though **SOFF** can be used as a well-informed platform for both buyers and sellers of safe and organic food, it required a lot of investment at the beginning with constant update of the platform, advertisement, marketing to get enough users (sellers and buyers). Only then, a fee can be applied. Due to limited resources, both financial and human, Rikolto couldn't make such investment (inviting more sellers to become members, marketing for more users, collecting information, making assessment on quality, etc.). SOFF was developed as a subsidized tool to address development issues, without developing a real business plan that is economically viable besides social benefit it brings, the failure due to limited resource is unavoidable.

For the capacity building of the **consumer protection organisation**, due to limited budget, the programme decided not to invest in training these partners, especially when awareness raising campaign for consumers won't be able to organize due to short of resources. The idea of working closely with **Vietnam Competition Authority (VCA)** or any other national agency to implement an action plan on the mainstreaming of consumers' right to safe food in food safety & consumer protection policies is not materialized due to limited resources that have been stretched out for 12 partners in 6 provinces.

Regarding women and youth as beneficiaries of the vegetable programme, there are 58% female and 4% youth benefited from the vegetable programme. Gender assessment in the vegetable sector shows that, female farmers are the financial manager in the family. However, actual expenses for the family **are** discussed and agreed within the couple. Engaging young people in the sector is more challenging as most of young people are not interested in farming work and migrate to cities to find job. Furthermore, as the programme works through partners, direct engagement in inclusive business to identify young entrepreneurs who are interested in safe vegetables to support was not carried out. The programme will address the transversal themes with more concrete action plan in the remaining time of the programme.

In all areas where Rikolto is active, programme team has always tried to seek for **synergies and complementary** with others in Vietnam, in the region as well as with academics from Belgium. In Ha Nam, complementary with other development partners working in the same areas have been well designed. Support from Rikolto and JICA in partnership with the government in the same areas have leveraged the resources of each agency, in which JICA focused on investment and subsidized cooperatives to participate in market fair, Rikolto provided technical support with focus on PGS and the government organized all training and coaching. In the region, Rikolto has co-organized

Sustainable Agriculture Learning Lab #3⁸ with ANDE (Aspen Network of Development Entrepreneurs), which has focused on women and youth in agribusiness. The event aimed at identifying entry points to support female entrepreneurs in agribusiness and better understand the need of young female entrepreneurs in agribusiness to better address the challenges when design any support in this aspect. With interest expressed by academics from Belgium, Rikolto collaborated with University of Louvain, University of Ghent, Free University Brussels, to facilitate researches on PGS and safe vegetables marketing in Hanoi, cocoa sector in Vietnam. This kind of collaboration will continue with a new PhD student, starting her follow-up research in 2020. With Hanoi PPD, TOT training to partners on PGS in all districts will be organized in 2020, to build capacity for the partners and leverage our impact when Hanoi PPD roll-out the training and coaching to their farmer groups using government resources.

To conclude, **the effectiveness of the safe vegetable programme of Rikolto is assessed as sufficient**, taking into account all constraints at the design as well as the challenges at the start of the programme with the lack of expertise in inclusive business. However, in a number of areas, the programme could have done better to reach to the next level of achievement with better market linkages and also better results at cooperative level on their capacity. Carefully selecting the right partners both at the provincial level as well as at the cooperative level would have helped the programme reaching more beneficiaries and better organized the market linkages.

2.2.5 Result 2

The second result is that inclusive business models for sustainable rice are mainstreamed across the Vietnamese rice subsector.

With such ambition, the programme designed with 3 intervention lines with (1) Enabling rice farmer organisations to access structured trading systems under good business conditions, (2) Testing the feasibility of using Participatory Guarantee Systems (PGS) as a quality assurance mechanism for rice produced according to the SRP standard and (3) Mainstreaming innovative, sustainable and inclusive practices across the Vietnamese rice sub-sector and internationally.

The intended results by midterm are presented in Table 4, in which actual achievement has also been presented.

Table 4. Comparison between expected results and actual achievement for rice sector - outcome level

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target
Result 2: Inclusive business models and sustainability standards are successfully scaled up and mainstreamed throughout the Vietnamese rice subsector				
Indicator 3: Number of farmers (F/M/Y) selling SRP-compliant rice to companies	0	3	500	1500
# female farmers	0	0		
# male farmers	0	3		

⁸ Event was organized in 2019 in Vietnam, in which female leaders of NGOs and selected young female entrepreneurs (CISIP, ISDS, Far Green, Vina Samex JSC.) were invited to share their experiences in working in this aspect.

# young farmers	0	0		
Indicator 5: Quantity of PGS rice sold on the domestic market (tons/year)	0	0	200	400
Indicator 6: Number of rice companies that have adopted inclusive business approaches in their business model	0	0	2	4
Indicator 7: Number of policies (new or adapted) that support more inclusive business relations in the rice subsector	0	0	1	2
Indicator 8.1: Number of publications (blogs, web articles, brochures, case studies, etc.) on PGS for SRP-rice (cumulative)	0	0	4	10
Indicator 8.2: An implementation guide on how to set up PGS for SRP-rice is developed (0 = no implementation guide, 1 = in development, 2 = available, 3 = available and up to date)	0	0	1	2

In the rice sector, **similar approach with evidence building** is the first step, followed by facilitating inclusive business model as a basis to achieve impact in SRP application at large scale. Such a stepwise approach takes time to get results. Despite of trainings on SRP and PGS organized for farmers, only after demonstration, SRP was assessed for its effectiveness and efficiency. The results were then disseminated to farmers to convince them applying the sustainable rice cultivation practice. In An Giang, only 2 cooperatives have been supported. Due to limited capacity of the partner, which is An Giang Farmer Union, expansion of the project in 2019 was not possible. In Dong Thap, despite of joining the project one year after An Giang, partner's commitment has showed much better results and interest from the cooperatives. By the end of 2019, the project reached 210 farmers in Dong Thap after one year of support, which is 7 times higher than the number of beneficiaries in An Giang (29 farmers) after 2 years of support. Demonstration models have proven that applying SRP helps saving more than 100Euro/ha/season thanks to appropriate use of agriculture inputs, including water. This has convinced farmers to apply SRP for 23ha in Dong Thap alone. However, in An Giang, due to lack of technical understanding of the FU, coaching to farmers in SRP was not possible, leading to farmers' low interest in SRP and unwillingness to adopt the standard. Given the opportunity of this midterm review, plus the new Regional Director coming to the office after a gap of 4 months in 2019, assessment of partners and intervention strategy have taken place so that suitable adjustment can be proposed to make the programme more effective and efficient.

After the SRP pilot, initial establishment on **market linkage has been facilitated with Phoenix** for 3 farmers, who are willing to make the first moves to show examples for others. 17ha of SRP rice had a contract with Phoenix by the end of 2019 (Winter Spring 2020 season) to test the inclusive business

model and build trust. Total SRP rice sold reached 100 tons. Incentive given to high SRP score for farmers to continue investing in SRP rice was agreed. With initial success in Dong Thap in the first season, it opens a door for further expansion of the SRP. However, a long-term contract is yet to be developed based on market demand as well as trust building between cooperatives and the company. Identifying other companies who are interested in SRP to quickly expand the SRP practices in a sustainable manner will be the priorities in the remaining time. To conclude, given the change in target province and serious delay in the project approval, the first intervention area is assessed as effective.

All other areas of intervention are far below expectation and assessed as not effective. Regarding the **testing of PGS**, as it is an internal control system tool that is applied to strengthen and assess SRP compliance, the pilot can only take place when SRP is applied by members in the cooperatives. Initial success in setting up market linkage with a company will meet the pre-condition for the first trial in the second half of 2020 after more farmers are engaged in this market linkage. The unsatisfactory of this intervention line is mainly due to the delay of the project. Given the progress and initial positive result in SRP pilot, the test of PGS tool will take place in the second half of 2020 and concrete results with assessment will be available for feasibility study on scale-up.

Transversal themes such as gender and youth are challenging areas of intervention for the rice sector, especially in the Mekong delta. In the rice programme, female farmers account for 10% of beneficiaries while youth accounts for only 4%. Gender assessment has been carried out for the rice sector in the Mekong delta. One of the findings is that rice cultivation is considered heavy tasks and therefore mostly male farmers are engaged in the work. Within a family, the wife shares workload with the husband in some stages such as soaking the seeds, transplanting, scaling, selecting middleman. At the point of selling the rice, the wife keeps the money and manages it for the family. The study also found that, female rice traders are normally more successful as they are better in negotiation. The study is a good basis for a strategy and an action plan to be developed and executed in the remaining two years of the programme. Engaging youth in the programme is very challenging as most of young people migrate to the cities to find higher paid jobs, leaving farms to their parents. In some cases, farmers lend their farms to others and migrate to the cities to get jobs. The programme could have done better in this intervention line. Unfortunately, due to the non-availability of gender expert in time, the study on gender was only carried out in 2019. As the topic is also interest for IFC and its customer, the study was carried out not only in the provinces where Rikolto works, but also other provinces and got co-finance by the IFC.

Synergies and complementary have been explored during programme implementation. Taking the advantages in the Mekong delta, where the government has invested a lot in technical training such as 3Reduces3Gains (3R3G) and 1Must5Reduces (1M5R) with subsidies to encourage farmers to come to training, Rikolto programme focused on the gaps between these technical trainings and other requirements under SRP standards. Development partners such as GIZ and Oxfam also worked in the Mekong delta, where they tried to support farmers both in mastering the technical knowledge and skills as well as improving market linkages. Under such context, as a small player, Rikolto joined effort with others to work in districts and with cooperatives where others are not yet provided support. While GIZ is working in collaboration with Olam, Oxfam is working with a number of local companies, Rikolto is working with Phoenix and exploring some others including big foreign companies (such as SunRice) and local companies that have their foot on the domestic market to test the SRP model for

both export market and domestic market. Besides these companies, Loc Troi Group (LTG) is another big player that is well known for their commitment in SRP rice. However, in the last years, LTG is under serious restructuring, in which more than 30% of their SRP contracted farms has been transferred to Phoenix. All companies who are expressing to the public that they are interested in SRP have been doing a lot of publication. However, actual investment on the ground is yet to be verified. Even with Phoenix, with whom Rikolto has worked with to facilitate long term contract with farmers, the experience is mixed. Further will be discussed in the Lessons Learnt section. As working in the SRP rice to create impact is very challenging, closely collaboration between different partners who share the same objectives is the aims of all partners. In the remaining years of the programme, Rikolto will continue to collaborate with GIZ and Oxfam, and other companies who have engaged in SRP at international level to promote further the engagement of others under the PPP in the rice sector to agree on Chapter for SRP and show their commitment in SRP rice.

Effort to **promote SRP to scale out and up was not properly addressed**. Despite of synergies and complementary when working in the Mekong delta, where other development partners such as GIZ and Oxfam also have strived for similar impact, the joint effort in policies influencing and further getting commitment of private sector is yet to be invested on. Rikolto in the first half of the programme paid more focus on evidence building and not yet took any initiative in further promoting SRP into the PPP platform in Vietnam. However, this work is in Rikolto's agenda which has been discussed with GIZ and Oxfam. Furthermore, in the remaining two years of the programme, Rikolto will discuss further with IPSARD, the think tank of MARD to seek opportunities to engage in national debate and providing evidence for policy influencing in the rice sector. What should be highlighted is the over ambition of the programme design to try to reach to the level of scale out and up at the national and international level. While SRP standards are highly contributed to environmental sustainability for the rice sector, the SRP initiative was newly developed (2015). Certification of SRP has not been tested yet. As a staple crop and mainly consumed by people in Asia and Africa, innovation such as SRP rice should be assessed not only in its positive impact to sustainable environment but also on social inclusion and market mechanism. While the first is clear and very convincing, the 2 latter points on social inclusion and market mechanism are still being assessed and debated. Rikolto with its commitment in innovation will continue to test the SRP model. Initial results will be shared at national and international forum to contribute to the debate and looking for a suitable mechanism to possibly scale out and up the model.

Similar to the vegetable programme, the **sustainable index indicators** need to have in-depth assessment to better understand why the value is lower than baseline data, especially for resource management, landscape management and climate change. Keep in mind that, the method of data collection at baseline and midterm is not comparable due to changes in the method, which can be the reason for the value of the indicators. However, the data signals closely coaching on technical application at farm level and better explain its impact to the environment when not following the agriculture good practice properly.

2.2.6 Conclusions

Overall, the programme was too ambitious in its design, going from pilot stage toward policy influencing at provincial, national and international levels. The programme faced serious delay in its implementation, plus limited resources and stretching out its intervention in 6 provinces, which hampered limited results achieved in the first half of the programme. However, within 1.5 years of

implementation, the programme effectiveness is assessed as satisfactory for vegetable sector and below satisfactory for the rice sector. With designed intervention, evident building has set a good foundation to achieve programme expected results. Strengthening farmer organization has contributed to increased collective sale for vegetables. Initial market linkage for SRP rice is facilitated where a big company is committed to by SRP rice. With earlier engagement in PGS in Vietnam, the programme in Vietnam has achieved encouraging results in contributing to the enabling environment for PGS adoption by Hanoi DARD.

With the stepwise approach from assessment and implementation of pilots to prove an innovation in the agriculture sector, followed by scale-up thanks to facilitating inclusive business model as well as enabling environment, the target set by the programme is far too ambitious, especially with the actual implementation period of less than 3,5 years. By the end of 2018, the programme suggested to adjust the target for its outcome indicators to make it more realistic. With the revised target set by the programme, it is likely that the programme will achieve the revised set target by the end of 2021. However, there are some weaknesses in the design and implementation, which will be addressed in the Lessons Learnt and Exit Strategy to ensure sustainability and impact of the programme.

3. Relevance analysis

This section will consider to what extent the intervention is relevant to the needs of the local stakeholders and market demand, as well as how it fits into the Government and DGD development framework.

3.1 Overall assessment

Concern of people on food safety remains on the top of the agenda. In a recent social survey⁹, food safety is the most pressing issue reported by consumers since 2017. It is even more important than health, environmental pollution, education and corruption. The consumers' concerns related to food safety include chemicals, pesticides and antibiotics residuals, and biological contamination. The foodborne disease data in 2018 reported 97 cases, with 3340 people infected, of which 2944 hospitalized and 16 death. In 2019, Vietnam recorded 76 cases of foodborne disease with almost 2000 people infected, of which 1918 hospitalized and 8 death¹⁰. The reported data is more than often underestimate the real number. ILRI estimates that, about 17% of the population got salmonella infection annually due to food and the estimated cost is at US\$570 million¹¹. However, from productivity loss and costs of treating illness, it is estimated that the cost in Vietnam is US\$740 million¹² and surpass \$1 billion including all related markets loss (WHO¹³) due to foodborne disease.

From an economic perspective, cost of illness, the cost of endemic (non-outbreak) foodborne diseases is largely unknown. For all illness caused by chemical residuals from food, or related to engagement in the food chain, the data is not available as it is not directly classified as foodborne outbreak. A recent blood test for 67 people from Soc Son, Dong Anh, Hoai Duc and Me Linh done by

⁹ Indochina Research, 2019

¹⁰ <https://www.vietnamplus.vn/thu-tuong-khong-nhan-nhuong-voi-hanh-vi-vi-pham-an-toan-thuc-pham/617974.vnp>

¹¹ Food safety and antimicrobial resistance research, Hung Nguyen, ILRI, EPI Seminar Series, Gainesville, 26 July 2019, University of Florida, USA

¹² Jaffee, 2019, The burden of foodborne diseases and the benefit of investing in safe food – economic cases for investment in food safety, presentation in ADDIS ABABA 12-13 Feb 2019

¹³ http://www.wpro.who.int/vietnam/topics/food_safety/factsheet/en/

National Institute of Occupational and Environmental Health showed that, 35 are safe, 31 are in risk (pesticides residuals in blood) and 1 is in high risk¹⁴. It is noted that these people are not farmers and not directly working in the field, they are mainly commune leaders, directors of learning centers in communes, plant protection staff. It is reported that, about 5000 cases of intoxication due to plant protection products, of which about 300 cases died¹⁵.

Despite of the effort from development partners, the government and the private sector, achievement in food safety is very little. After 10 years of promoting and supporting VietGAP, by the end of 2018, only 1900 cultivation farms obtained VietGAP certificates for vegetables, with an area of 81500 ha, accounting less than 10% of the areas¹⁶. In the meantime, the products with VietGAP certified do not get consumers' trust. The Global GAP certificate is too costly, which makes it non-affordable my smallholder farmers, especially those live in the North, with small farm size and difficult to organize with other farmers for landscape management. PGS is an affordable tool and mechanism for farmers to apply, which then can be scaled up to produce safe vegetables, which is affordable to larger population. PGS can also be set as the minimum requirements to ensure safe vegetables are sold in all markets, both modern retails and traditional wet markets.

In the Mekong delta, climate change impact has caused saline water intrusion in coastal provinces. In the upper region of the Mekong delta, flood and drought appear more often and unpredictable, which has negative impact to the rice cultivation and livelihood of the farmers in the Mekong delta. Furthermore, high use of pesticides and fertilizers in the rice cultivation has negatively contributed to the sustainable environment as rice cultivation produces large amount of GHG emission and water. As the third rice exporting country in the world, of which 90% comes from the Mekong delta, improving rice cultivation practices of farmers will contribute largely to environmental impact. In the meantime, introducing alternatives to 3 rice crops will help farmers better adapt with the climate change impact in the Mekong.

3.2 Vegetable sector

Table 5. Comparison between expected results and actual achievement for vegetable sector - impact level

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target
Specific objective: Fruits, vegetables, and rice in Vietnam are produced in safe and sustainable ways and marketed through viable, competitive and efficient chains benefitting smallholder producers				
Indicator 1: # beneficiaries				
Total	81	446	650	1100
# female farmers	65	257		
# male farmers	16	189		

¹⁴<http://bachmai.gov.vn/tin-tuc-va-su-kien/y-hoc-thuong-thuc-menuleft-32/4568-xet-nghiem-dang-lo-ve-thuoc-tru-sau-quanh-ha-noi-67-nguoi-thu-chi-35-nguoi-o-muc-an-toan.html>

¹⁵ <https://hatinh.gov.vn/nong-dan-ha-tinh-su-dung-tren-120-nghin-tan-thuoc-bao-ve-thuc-vat-va-phan-hoa-hoc-moi-nam>

¹⁶ cuctrongtrot.gov.vn/TinTuc/Index/4302

	# young farmers	5	18		
Indicator 2: Share of total household income derived from the sales of safe/sustainable fresh fruits & vegetables and rice					
		55.7%	59.1%	50%	60%
Indicator 3: Sustainable production index					
	Soil conservation	2.20	1.25	2.5	2.8
	Water management	1.24	0.54	2.0	2.7
	Resource management	1.86	1.61	2.2	2.55
	Climate change	0.91	1.21	1.3	2.4
	Biodiversity	1.61	1.67	1.8	2.4
	Landscape management	0.73	0.71	1.2	2.1
Indicator 4: # indirect end beneficiaries					
	# producers and consumers that are reasonably affected by changes in public and private policies	0	0	1,000,000	2,000,000
	# household members [= # quality food producers * (average household size – 1)]	1568	1361	1860	3146

The vegetable programme is implemented in the Red River Delta provinces including Vinh Phuc, Phu Tho, Ha Nam, and Ha Noi, and Da Nang- a city in the Center.

Government has concern on the food safety and invested a lot in providing support in agriculture extension and promoting VietGAP. Unfortunately, after many years, it doesn't take off. Most of the farms turn to business as usual after subsidies for the VietGAP certification stop. On one hand, it is because the farmers do not always get higher prices for VietGAP-certified products. On the other hand, the consumers don't trust VietGAP certificates. Given the situation, PGS seems to have a competitive advantage edge in terms of its low cost in management and certification.

Environment for Rikolto vegetable program is conducive. PGS approach is well-known and appreciated by and among researchers and agriculture authorities as effective tool for building trust of consumers to producers' quality produce. The head of national agriculture academy and national association of organic food, both advocate for government to accept PSG as a formal certification for safe vegetable production process¹⁷. At the province level, the government in Phu Tho and Hanoi acknowledged PGS as a quality assurance system among others accepted in the local food system. The vice-head of the Phu Tho Department of agriculture and rural development (DARD) specifically announced that the department is working on formulating policy for promoting safe production,

¹⁷ <http://vietnamorganic.vn/chi-tiet-tin/272/san-xuat-rau-huu-co-cung-Pgs.html>

branding safe and organic food, and integrating cooperative- food producers in the food value chains¹⁸.

In Hanoi, starting successfully in one pilot vegetable producer-cooperative in 2017, the Hanoi DARD expands the PGS system in 25 communes in three districts that are major supply sources for the city population. The transformation of safe vegetable production sector in Hanoi is however not yet flying. PGS remains a voluntary certification, until it is adopted by the government to turn it into the minimum safety requirements for vegetables supplied to the market. This is the most challenging stage. Currently, the ex-post inspection of safe food (vegetables) is too costly to make it effective, especially in the context of very large number of wet markets and about 80% of consumers still buy their perishable products in the wet markets. Supporting farmers in changing farming practices in large scale will help putting the pre-conditions in place before the government can properly manage food safety issues and shift from ex-post to ex-ante inspection. For that reason, Rikolto technical support to Hanoi DARD developing a standard, applicable PGS toolbox, which is officially approved by the government for largely apply in the government programme is highly relevant. This not only addresses food safety in the food system context, but also helps improving health of farmers, consumers and environment sustainability.

At the farmer organisation level, Rikolto in Vietnam's annual assessment showed that, key personnel of cooperatives has sufficient capacity, knowledge and skills; their organizations are capable to carry on with PGS, and they have established well trusted relationship with whole-sale businesses, which brand their produce on their names and trade the produce on nearby cities and Hanoi- the capital.

In some cooperative, the partners, farmers' organizations reported they switched to a system where the whole-sale buyers take care of quality control of their produce, which is accepted when the produce passes the quality (chemical tests). Managers of the vegetable cooperatives shared at the workshop that it is their interest to keep up to quality standard to for selling their produce at good (agreed) price negotiated. Their internal quality control also functions to maintain safe and quality produce.

According to the 2019 midterm survey at farm level, thanks to the strengthening of the farmer organization and facilitation on inclusive business, a number of cooperatives have improved their collective sale with higher price for safe vegetables, with the most pronounced are Cat Lai (Ha Nam) and Dang Xa (Hanoi). The farmer survey confirmed with respondents giving confirmative answers in Hanoi, Vinh Phuc and Ha Nam is 57% and in Da Nang is 28%. In other cooperatives, most cases are old type of cooperatives, where leaders' capacity hasn't reached to the level where they can master their marketing and sale skills, collective sale hasn't been taken up and farmers sell their vegetables to traders, who then sell to the wet markets. In specific cases, farmers are also interested in selling their vegetables to the wet market by themselves, as they can get higher price. However, this is the choice of those who have time and would like to invest their time to get such margin from retail market.

Regards to the **income increase and share of income increase** at farm level, the survey showed that 42.6% farmers responded that their income increases and 33% response that their income decreases. Safe vegetable production brings high profit, up to more than 300% when labour is not counted in monetary term. It contributes a stable income for farmers. Supporting to safe vegetable production

¹⁸ <https://www.phutho.gov.vn/Pages/TinTuc/207171/Giai-phap-cho-xay-dung-chuoi-lien-ket-nong-san-an-toan.html>

for which the demand is increasing is the intervention by Rikolto to help the farmer to increase their income. The relevance was proven with an increase of the share of income derived from vegetables, from 35% to 59% against the target 50% set for 2019. However, increasing further the income share depends on a number of other factors such as type of vegetables and other income sources of the family. For the choice on types of vegetables, it depends on the demand and also the technical knowledge of farmers, soil and weather conditions. Rikolto programme can assess further on market demand, facilitate inclusive business and provide further support on technical if the earlier is conducive.

Table 6. Income changes compared to the baseline (VND/ha) – Vegetable sector

Region	No.	FO	2017	2019	Changes in %
Red River Delta	1	An Hoa	235,014,237	280,425,655	19%
	2	Thanh Ha	326,247,045	354,926,747	9%
	3	Van Hoi Xanh	292,525,773	257,861,430	(12%)
	4	Cat Lai	234,825,708	264,652,778	13%
	5	Trac Van	348,662,227	597,051,852	71%
	6	Tu Xa	278,479,450	390,323,315	40%
Central	7	La Huong	172,584,302	335,024,358	94%
	8	Ninh An	71,849,045	318,748,672	344%
	9	Tuy Loan	143,115,385	495,417,891	246%

Table 7. Income changes compared to previous year by region - Vegetable sector

Income change compared to previous year	Red River Delta		Central	
	Count	%	Count	%
Decrease a lot	4	4%	1	4%
Decrease a little	28	31%	5	20%
Same	24	27%	4	16%
Increase a little	28	31%	14	56%
Increase a lot	6	7%	1	4%

One of the critical issues should be discussed is the **sustainability index**. The farmer survey results showed that, in vegetable sectors, though positive improvement is found in climate change and biodiversity index; the soil management, water management and resource management are deteriorated.

Farmers perform not very well in soil management In comparison with the baseline results. This could be due to the change in the method of collecting these data for baseline and midterm. However, the programme will organize coaching besides training to farmers in the coming years to ensure that knowledge on good agriculture practices will be applied properly in the field, which then will contribute positively to the environment protection.

Soil conservation techniques came under GAP training as part of PGS provided within Rikolto intervention. Compost was the most applied technique. The introduction of these techniques was of

high relevance since the “conventional cultivating method” used a lot of chemicals and did not consider the conservation aspects. Yet, in fact, there are practices that are hard to apply technically for example green manure crop (farmers are with intensive cultivation system), livestock combination or planting more trees for biodiversity. There existed trees in the field but by intention these trees were planted for economic or shade purposes, rather than aiming at biodiversity.

At farm level, for farmers who engage in vegetable sector, the survey shows that more than 90% of them practice GAP to avoid soil contamination, except using organic inputs. The latter may be a costly method that the farmers cannot support, while other techniques require almost no additional costs from farmers. At farm level, among practices that help increasing the organic matter and nutrient levels in the soil, the most popular method is mulching. The farmers almost do not practice bio-diverse trees, manure crops and using livestock. These can be areas for further improvement (Table 7).

Table 8. Soil conservation practices by vegetable farmers

Farming practice to avoid soil contamination				Practice to improve soil nutrient levels			
Practice		Vegetables		Practice		Vegetables	
		Count	%			Count	%
Organic input	False	108	94%	Mulching	False	7	6%
	True	7	6%		True	108	94%
Composting	False	8	7%	No burning	False	46	40%
	True	107	93%		True	69	60%
Safe water	False	2	2%	Ploughing	False	38	33%
	True	113	98%		True	77	67%
Crop variation	False	11	10%	Manure crops	False	102	89%
	True	104	90%		True	13	11%
Correct input use	False	8	7%	Bio-diverse trees	False	109	95%
	True	107	93%		True	6	5%
				Livestock	False	114	99%
					True	1	1%
				No practices	False	115	100%
					True	0	0%

In regard to **water management**, the survey results show that farmers follow techniques that are applicable at the individual level, but not collective action, such as irrigation system. Again, rainwater appears an untapped resource with only 15% of respondents reported of using it for irrigation and water management. The main reason is that the plots of land are small and scattered therefore it was difficult to invest water collecting system or a central irrigation system, given the fact that the target beneficiaries are small farmers. Rikolto would focus better more on other GAP that help to maximize the use of water, such as mulching.

Table 9. Use of water by vegetable farmers

Water retention and run-off protection				Prevalence of using techniques for irrigation and water management			
		Vegetables				Vegetables	
		Count	%			Count	%
Rainwater	False	110	96%	System	False	93	81%
	True	5	4%		True	22	19%
Cover crops	False	72	63%	Mulching	False	28	24%
	True	43	37%		True	87	76%
Harvesting	False	51	44%	Rainwater	False	98	85%
	True	64	56%		True	17	15%
Water management	False	97	84%	Crops	False	49	43%
	True	18	16%		True	66	57%
Crop calendar	False	67	58%				
	True	48	42%				
No practice	False	113	98%				
	True	2	2%				

At farm level, the survey reveals that not many farmers producing safe vegetables practice techniques that help increase water retention and decrease run-off. Almost none practice collecting and use rainwater (4%), few use water management (16%) and cover crops (37%). Crop calendar as a measure of water conservation, retention and run-off protection is more common (42%). Apparently, water conservation and management are areas for improvement.

To avoid water contamination, the most common methods are safe-handling and crop GAP, 67% and 63% correspondingly. Few farmers see IMP as helping to avoid water contamination. Quite a number of methods are almost not practiced by the farmers (Table 9). Technical training should further look at how best to enforce this knowledge to farmers and improve their farm practice to avoid water contamination.

Table 10. Application of methods to avoid water contamination by vegetable farmers

		Vegetables	
		Count	%
Prevention	False	115	100%
	True	0	0%
IPM	False	72	63%
	True	43	37%
Safe handling	False	38	33%
	True	77	67%
Traps	False	109	95%
	True	6	5%

Buffer	False	115	100%
	True	0	0%
GAP	False	42	37%
	True	73	63%
	True	2	2%

To conclude, the intervention in vegetable sector is highly relevant to the sector as well as the achievement of the outputs. However, to make it more effective, the programme should invest further on the farming practices, where resource management should be improved to positively contribute to environment sustainability.

3.3 Rice sector

At the national level, rice restructuring programme has been approved by the government with total areas for rice production will be reduced from 4.2million ha to 3-3.2 million ha by 2030. Such programme is to address the impact of climate change in the Mekong delta with increasing saline water intrusion in the coastal region of the Mekong delta and unpredicted flood and drought in upper region of the Mekong delta. While rice produced in the Mekong delta account for 50% of the rice production in Vietnam, it accounts for 90% of the rice export. Most of concern from companies in this region is on the chemical residuals in the rice, as it is very high risk for exporters especially when the rice enters EU market or other high-end markets. With the increasing concern on climate change impact, the government has been promoting sustainable rice production through introduction of 3 Reduces/3 Gains, 1Must5Reduce, IPM approaches. Besides, sustainable practices such as Global GAP, VietGAP have also been introduced by others, including private sector to tap into markets that require strict measures on residuals. Recently, SRP has been developed and agreed at the international level as the right way to move forward with the rice sector as it does not only bring the economic benefit to farmers thanks to less agriculture input use, but also its contribution to reduce GHG emission and coping with less water availability. With that extra miles, international organization including GIZ, Oxfam and Rikolto are putting effort to bring impact to the rice sector in the Mekong delta with the introduction of SRP in combination with facilitating inclusive business model to engage more and more farmers in the Mekong to improve their rice cultivation practices as well as engaging more enterprises to commit in SRP. Besides, the climate change impact has also required farmers in the Mekong delta to adapt by applying alternative crops (fish-rice, duck-rice, shrimp-rice, fruits and vegetables) depending on the location.

Having confidence in contract farming with Large Farm Model (LFM), government issued conditions to limit number of rice exporters, by imposing LFM quotas to rice exporters in 2015¹⁹. This has triggered a wave of increasing number of farmers, hence total areas of rice cultivation (from 146000ha in 2014 to 196000ha in 2015), in contract farming with companies. This brought a lot of benefit to farmers. Unfortunately, companies were in the loss due to increasing cost to manage contracts with individual farmers, increasing capital when supplying agriculture inputs to farmers. Many attempts to influence the policies from private sector to remove the conditions on contract farming, which was successfully with the issuance of Decree 107/2018/NĐ-CP on rice export, dated 15 Aug 2018 and effective from 01 Oct 2018. This has resulted in the reduction of contract farming

¹⁹ Decision [606/QĐ-BCT](#) dated 21 Jan 2015

drastically, with Loc Troi Group reported a reduction from 90000ha in 2015 to 30000ha in 2019. Since 2017, it is challenging to put farmers in contract with companies. However, as SRP is a new standard promoted at international level, some companies express their interest and put some effort in trying to get SRP rice. Loc Troi Group, with financial assistance provided by IFC, has implemented a two-year project aiming at SRP pilot with 4,000 rice small-holders out of its pull of 25,000 contractual rice small-holders in An Giang. However, concrete evidence on the ground of how target has been achieved was not available. Despite of potential markets such UAE and Middle Eastern region, evidence of serious investment in SRP from private sector (LTG, Phoenix, Olam, ect.) is yet to be confirmed. A real market opportunity for SRP rice is under exploration. It is therefore very challenging journey ahead for the rice sector toward fully compliant to SRP standards. Efforts of development partners, political commitment of governments at both national and international levels, and real commitment of the private sector are needed to make transformation in the rice sector toward sustainable production.

Table 11. Comparison between expected results and actual achievement for rice sector - impact level

Indicator	2017 (baseline)	2019 observed value	2019 original target	2021 original target
Specific objective: Fruits, vegetables, and rice in Vietnam are produced in safe and sustainable ways and marketed through viable, competitive and efficient chains benefitting smallholder producers				
Indicator 1: # beneficiaries				
	Total	0	238	3500
	# female farmers	0	23	
	# male farmers	0	215	
	# young farmers	2	14	
Indicator 2: Share of total household income derived from the sales of safe/sustainable fresh fruits & vegetables and rice				
		88.2%	77.8%	60%
			70%	
Indicator 3: Sustainable production index				
	Soil conservation	1.09	1.76	2.0
	Water management	1.59	2.14	2.3
	Resource management	1.65	1.53	2.3
	Climate change	1.42	1.65	2.0
	Biodiversity	0.86	0.79	1.6
	Landscape management	1.36	0.04	1.5
Indicator 4: # indirect end beneficiaries				
	# household members [= # quality food producers * (average household size – 1)]	0	738	10,010
				15,444

From the Table 11, it is clearly seen that the achievement is far to match the target set, especially for the number of direct and indirect beneficiaries. The main reason for this difference is the withdrawal of Phu Tho from the programme due to different priorities as mentioned in the context. The nature of agriculture production in the Red River Delta where Phu Tho is allocated is that the farm size is very small, and the FO normally consists of more farmers. In Dong Thap, where the programme has selected to replace Phu Tho, the nature of farm size is larger (2-5ha/household) and the number of farmers in a group is smaller. Therefore, despite that target on beneficiaries doesn't meet the set value, the total production of SRP rice still met the target. With the reality as explained, the project suggests adjusting this target number, which will be presented in more details in Exit Strategy with a separate section.

Rikolto rice programme experienced geographical upheaval. Dropped by Phu Tho who tentatively shared a prominent proportion of beneficiaries (1.500 farmers), the program was then planned to initiate only in An Giang province. The distribution of FO members dramatically varies between the North and the South. While a rice FO in the North might cover more than 1000 farmers who owned 0.14ha each, that in the South involved much fewer members who possessed 1.7 ha on average. Therefore, the dropping of Phu Tho which is in the North brought a remarkably decrease in beneficiaries.

Rikolto has been a member of the Advisory Committee of the SRP (Sustainable Rice Platform) since 2015. Its rice program started in Mekong in 2017 in Tri Ton district An Giang Province. The program expanded to Dong Thap province in October 2018. Trainings have been organized for farmers in An Giang. Taking into account earlier support by the government under a project funded by the World Bank as a loan, the trainings provided by Rikolto only focus on packages that are not yet introduced in the earlier trainings, while giving farmers the full picture on SRP and its requirements. SRP scoring exercise in An Giang showed that, the score is only 74 for the first cooperative and 61 in the second cooperative (joined one crop later). The reasons have been explained earlier in the effectiveness analysis, limited capacity of partner in An Giang – Farmer Union and the unwillingness to adopt SRP of farmers here. In An Giang, as Tri Ton district is affected by flood, Rikolto has also introduced the fish-rice model combined with SRP to address the need in the local context. The model has proven economic value, potential climate change and biodiversity impact thanks to its affect to less pest in the rice field for the next crop. However, expansion required further inclusive business model to be established. Besides, the fish-rice model requires large investment, which is not always favourable for farmers. The project with limited resources cannot provide full subsidies after the demonstration; however Rikolto is seeking for other sources to work on the fish-rice cultivation in the Mekong delta.

Taking into account experiences in An Giang, the project decided to partner with Dong Thap Department of Agriculture and Rural Development. Similar training approach was applied, coupled with demonstration model to show the benefit in saving agriculture inputs. The results were shared with farmers to engage them further in better application of SRP expecting to achieve higher SRP scores. Demonstration has proven that farmers will save a bit more than 100 Euro/ha/season when applying SRP techniques. A small-scale test in having contract with Phoenix in 2019 and receiving premium for those with SRP scores above 90 was facilitated for 4 farmers, who are the first movers in SRP application, one is the cooperative leader. Result of the test will be assessed, and solution will be developed for the remaining two years of the project.

In the current test with Phoenix, as the volume is very small, it didn't really make any impact to the sale that Phoenix targets for its export market. In case they have already had SRP rice under the partnership with LTG, then this is just a small volume to top up. However, this test helps us to better understand if Phoenix is serious in its commitment with SRP and which rice varieties would give the best opportunities for both farmers and companies to win in this SRP application. As the matter of fact, having storage and milling factories under construction, Phoenix is not in position to start rice trading in Mekong but rather buying rice via local trading partner. The situation of partnering with Phoenix on SRP contract farming will be reassessed in 2020. From the context and meetings with different companies, it is found that at the early stage of SRP application, it is best suit for rice seed production, which required strictly control during production, and high quality rice such as Japonica, which is sold at a higher price. The earlier case would definitely work as Vinaseed has expressed its interest. However, the impact will not be big, and it is not clear what is expected from Rikolto. For the later, Rikolto will explore the partnership with SunRice and initial response from SunRice is positive. Actual commitment from SunRice will be confirmed after the approval from its Head Office in 2020.

Though intervention in the rice sector does help farmers to save their investment in agriculture inputs at the pilot only, it shows that the intervention is relevant. Despite of limited farmer participation in actually applying SRP, potential impact on their income increase is likely to be achieved in the coming years. However, from the sustainable index, despite of incomparable method applied at baseline and midterm and increasing number of farmers participated in the survey, it is worth to look at the indicators where a lower value at midterm are observed, which helps to better improve the intervention and makes it more relevant.

Resource management, climate change and landscape management are the 3 indicators that need to look deeper. The survey results in 2019 showed that poor straw management and excessive level of pesticides used are the areas for improvement in rice cultivation. Burning straw remains a common practice.

With regard to resource management, the midterm survey records almost the same low scores in waste (rice stubble and straw) management because there were still 36.4% farmers burned stubble and 38.2% farmers burned straw, and a decreased score in IPM in comparison to those in 2017 because more farmers used chemical products when dealing with weed, insect and disease. Whereas, the scores for fertilizer choice and use remain high (above 2.0). To improve the situation of straw, stubble management and CO2 mitigation, alternative straw & stubble management (such as using straw to grow mushroom or use trichoderma for better decomposition) should be tested and feasibility for scaling up should be studied and applied. Excessive levels of pesticides used will be addressed with training, coaching and more effectively in the flood areas, fish-rice or duck-rice model can be applied as the solution.

Table 12. Stubble management practices by rice farmers

Practice	Count	%
Rice stubble is burned	20	36.4%
Stubble ploughed under while soil flooded, or while the soil is dry, without sufficient time for	2	3.6%

decomposition		
Stubble grazed by livestock, ploughed under while soil dry, in time for aerobic decomposition before next crop	24	43.6%
Stubble grazed by livestock, left on field in minimum-tillage while soil dry, in time for decomposition before next crop	9	16.4%

Table 13. Straw management practices by rice farmers

Practice	Count	%
Rice straw is burned without purpose	21	38.2%
Straw is removed from field and used for energy production or other purposes or ploughed under	30	54.5%
Rice straw is removed from the field, and is composted or used as livestock but not returned to the rice field	0	0%
Straw not burned, but left on field or ploughed under for decomposed or live-stock feed and decomposed manure	4	7.3%

Table 14. Weed management practices by rice farmers

Practice	Count	%
Only non-chemical options for weed control are used, no use of herbicides at all	0	0%
Herbicides are used, but whenever feasible, non chemical methods are used	33	60%
Herbicides are used, but only applied if non-chemical methods are not sufficiently effective on their own	7	12.7%
Herbicides are used, but applied only during early crop growth stage, before rice canopy closes, and when weeds are small	54	98.2%
Herbicides are used, but an appropriate herbicide is used for the type of weed problem (choice of mode of action)	17	30.9%
Herbicides are used, but local information about herbicide-resistant weeds is used when choosing an appropriate herbicide	5	9.1%

Table 15. Insect management practices by rice farmers

Practice	Count	%
Only non-chemical options for insect control are used, no use of insecticides at all	2	3.6%
Insecticides are used, but whenever feasible, non-chemical methods are used	35	63.6%
Insecticides are used, but only applied if non-chemical methods are not sufficiently effective on their own	11	20%
Insecticides are used, but applied only if presence of specific pest at high density has been confirmed and damage is high (not preventively; apply action thresholds if locally available)	44	80%
Insecticides are used, but are only applied more than 40 days after sowing (exceptions to the latter are acceptable if following IPM recommendations by local government extension experts)	26	47.3%

The climate change index value goes down a bit as a result in a decline in organic matter management and carbon sequestration scores, which go from 2.64 and 1.55 in 2017 down to 1.57 and 0.86 respectively in 2019. The score for CO₂ emission during irrigation has increased from 1.64 in the baseline survey up to 2.14 in the midterm assessment.

Table 16. CO₂ mitigation techniques by rice farmers

Practice	Count	%
Returning production wastes to the soil, or composting or feeding wastes to animals	30	55%
Production wastes are burned without any purpose	23	42%
Using production wastes as fuel in energy-efficient equipment to save on the use of firewood	2	4%

In 2019, both criteria under the landscape management index (safeguarding landscape wide connectivity of natural ecosystems and Identification of ecosystem services at a landscape level) get a 0 score while the average baseline score is 1.36. This is because in 2017, some farmers and extensionists in Tan Tuyen commune attended trainings on landscape management organized by the province. From 2017 - 2019, there has been no activity related to this topic that was implemented.

Table 17. Landscape management practices by rice farmers

Practice	Count	%
Natural ecosystems at a landscape level are mapped and updated	4	7%

periodically.		
Connectivity of natural ecosystems are maintained and connectivity gaps are rehabilitated.	0	0%
Community based education about natural ecosystems and their state of connectivity.	0	0%
Natural ecosystems at a landscape level are identified through document review and field surveys.	0	0%
None of the above	52	95%

To conclude, the intervention in the rice sector is relevant to the sector as well as the achievement of the outputs taking into account the very limited resource Rikolto investing in the sector (time and money). Despite of having no office in the Mekong delta, the selected provinces are the most relevant for the rice sector and very promising for scale up when the pilot is successful. Impact on sustainable rice production can be achieved faster when working in the bow of rice, with other development partners and big companies who have resources to invest. Furthermore, with climate change impact in the Mekong, introduction of SRP rice plus other alternative model of flood areas will bring socio-economic and environment values to the food system in general and to the farmers in particular. Our expertise on SRP has been recognized by international players such as FAO, who seeks for our advices when they develop intervention in the Mekong River Delta on sustainable rice production.

3.4 Conclusion

Despite the serious delay of the programme approval and implementation, as well as the drop of Phu Tho, the programme has been striving to adapt its' intervention strategies in such way that it addressed the changes and effectiveness towards expected results. The programme did target well the needs and aspirations of the target sectors as well as the small household farmers and farmer organization it works with. The programme aims at sustainable production, improving the well-being of the local farmers through interventions to support the farmers to develop sustainable agriculture production and facilitated them in inclusive business to better access to the market. The programme is flexible enough to drop or adjust a number of intervention strategies that are not much relevant such as the PGS network at national level, the work on consumers' right on safe food. Inclusive business facilitation is highly relevant work to achieve intended results and should be paid more attention to have larger impact at both producer and consumer ends.

4. Lessons learnt

The Vietnam programme offers some lessons learnt that including programme design, setting priorities, choosing partners, Rikolto's role and investment in inclusive business.

With regard to **programme design**, for years, the increasing concern of people and Vietnamese Government on food safety remains at the top of the agenda. In a recent social survey²⁰, food safety is the most pressing issue reported by consumers since 2017. The consumers' concerns related to food safety include chemicals, pesticides and antibiotics residuals, and biological contamination. In 2019, Vietnam recorded 76 cases of foodborne disease with almost 2000 people infected, of which 1918 hospitalized and 8 deaths²¹. Rikolto programme intervention addresses directly food safety issues that are very much **in line with the top ongoing effort** of the government and other stakeholders. Therefore, it has been receiving positive responses and cooperation from partners.

However, with limited resources²², the programme was designed to be implemented in 6 provinces and working with 12 partners, which have stretched both financial and human resources as well as coordination and management requirements. This strategy designed at the first place aims to reduce the risk of PGS piloting. However, such strategy is found not suitable under limited financial resources and short time frame. Furthermore, many provinces and partners are new, which needs time to build partnership and planning for the implementation. Though, concrete foundation has been achieved, further prioritisation to narrowing down the provinces as well as partners will be carried out in 2020.

The programme design didn't take into account the administrative procedures and bureaucracy of the system, leading to an over optimistic planning of the achievement for a 5-year programme which ends up in a less than 3.5-year programme.

The programme has developed too many indicators. Many are not focused on results that make it costly to monitor. Not all indicators correctly reflect the situation on the ground and the results of planned interventions, which didn't help reflecting the programme intervention based on these indicators. Furthermore, the set targets are too ambitious. Suggestion to replace some indicators by others that reflected the intervention areas will be presented in Annex 1. Revision of target will also be presented.

Intervention strategies: To make contribution to systemic changes, the programme has picked up the strategies that address technical issues at production, inclusive business and policy influencing. The strategies aimed at changing farmers' practices, farmer organization strengthening, private sector adopting inclusive business model, and the government issuing better policies and investing more to the sustainable production and increasing consumers awareness and knowledge on safe food as well as their right to access to safe food. The programme has targeted all actors related to value chain and environment, in which the implementation has effectively implemented in most cases. However, concrete target towards consumers was not properly selected. With the step wise approach from building evidence to policy influencing, immediately addressing the issues from the consumer end as a general target group is too costly and the programme at the end couldn't afford it. The programme will leave the ambition on advocating for consumers' right but will continue to work on awareness raising on safe food for consumers, with focus on safe vegetables and sustainable rice production in joint effort with others when opportunities arise.

²⁰ Indochina Research, 2019

²¹ Rikolto Vietnam, Food system analysis, 2019

²² Total of 1,739,038 Euro, of which 56.11% (929,320.88 Euro) for programme intervention in 5 years

The advocacy for PGS at the national level through PGS networks is not the best strategy, especially when the provincial networks haven't shown concrete results at policy influencing at the provincial level. In the remaining two years, effort on policies influencing will be put on provinces where concrete positive results have been achieved. At the national level, we will work in collaboration with other development partners and make contribution from our success at the provincial level when opportunities arise.

FSC strategy for Da Nang has been recommended to Da Nang authorities, however having a strategy developed and approved by the government with budget allocation requires political commitment at provincial level. With priorities on services and tourism, while more than 90% of agriculture products are "imported" from other provinces, before a comprehensive strategy is adopted with budget, the programme will identify some entry points to work with the government to address larger issues on food safety in combination with inclusive business model of safe vegetables.

Selection of partners: Though target beneficiaries are farmers and farmer organisation, the programme strategies are technical support, market facilitation and enabling environment, in which FU is not the best choice to help making necessary changes. In Vinh Phuc and An Giang, FU has been proven not the right partners. With technical intervention on the ground, technical department in target province is the most appropriate partner for project implementation. They are also the right partner to move forward with policies recommendation and can trigger systemic change.

Working with right partners contributes to the realization of our objectives. Committed partners working toward sustainable production have largely contributed to the success of Rikolto's programme. Rikolto has been working with the Plant Protection Departments (PPD) in the target provinces. These are the technical and advisory bodies affiliated to the provincial Department of Rural and Agriculture Department (DARD), the governmental body responsible for food safety control in agriculture sector. In Hanoi, under the technical support of Rikolto, Hanoi DARD officially issued the PGS technical guidelines late 2019, marking an important milestone for PGS to be officially allowed to apply in Hanoi agricultural sector. This high commitment from PPD and increasing ownership in addressing food safety issues in Hanoi is crucial for the scale-up, sustainability and impact in the coming years. In the rice sector, commitment of the Plant Protection Department in Dong Thap has contributed largely in the results of SRP demonstration and market facilitation with company. Though the results in the rice sector are modest, its momentum will help speeding up in the SRP application in the remaining 2 years of the programme.

Private sector engagement can be powerful to have large impact. However, real commitment in sustainability is hard to find in the rice sector when rice is traded as commodities. Big companies are interested in putting up the images rather than seriously investing in sustainable products. It is therefore very challenging to identify the right company that can actually make the impact. In the vegetable sector, though enterprises interested in safe products are found, the volume traded is limited. Policy influencing on safe food is the way to move forward, however it will take much longer time to change. Combination of both market intervention and policy influencing will be the in our exit strategies.

Rikolto's role in inclusive business: Working through partners is the strategy of Rikolto's programme 2017-2021. Though this is the right strategy, it is found that the partners haven't got the right capacity and mandate to work on inclusive business and facilitating market linkages. Besides, there is

low interest of private sector in safe products as correctly assessed in the risk assessment at the programme planning stage. It is very challenging to facilitate market linkages with designed intervention through partner organization. Deepening involvement of Rikolto in inclusive business model, together with partners and farmer groups, to identify the right enterprises so that market linkages for safe products will be strengthened, which contributes to the sustainability of the programme.

Introduce innovation to reach impact is not a short-term investment: Rikolto in Vietnam have introduced three innovations which are the Participatory Guarantee Systems (PGS) for safe vegetables, Sustainable Rice Platform standards and the model of Food Smart City (FSC).

The adoption took place with PGS by Hanoi DARD in 2019 thanks to the recognized contribution of PGS in food quality assurance by the government. But that is not enough. PGS needs to be broadly known by consumers, private sector to stand alone without external support. We have identified a number of other conditions for PGS to survive, including (i) the effectiveness and affordability of the PGS to smallholders is acknowledged enterprises and consumers; and (ii) the absence of government's subsidies to traditional third-party certification systems (that competes unfairly with PGS). In this context, private sector will play a vital role in pulling the farmers to follow the quality assurance system. And this is the intervention that Rikolto is heading to. Pilot intervention in other provinces remains modest. Conditions that made this influence possible are the market demand, urbanization process, engagement of private sector as well as strong commitment of the government to the food security and food safety for their citizens. In the project provinces, the government has strong policy and programs promoting safe food production with specific projects, which target vegetable production areas.

Food Smart City cluster is a setting amongst Rikolto regions. This concept is only recently introduced in Vietnam and the model was carried out in Da Nang, a city in the central of Vietnam. It is built on the establishment of convincing pilots or exploring of the existing good ongoing practices as the level 1, and subsequently promotes learning and sharing of the best food related initiatives/pilots (level 2) and eventually tries to make meaningful to international food agenda (level 3). While the level 1 is operating, the level 2 and 3 seems to be too ambitious. The learning probably would take place within the country rather than at the international level due to the political differences. What have been done in Da Nang (in June 2018, Da Nang Food Safety Management approved a research titled "Analysing Food Value Chain and Developing Food Smart City by 2025 with vision to 2030" funded by the Belgian Study and Consultancy Fund (SCF), facilitated by Rikolto) inspired other stakeholders. World Bank has partnered with Rikolto, VNUA, CIAT and the Asian Foundation to carry out a rapid diagnostic assessment of the food system and food safety hazards in the cities of Hanoi and Ho Chi Minh City. Quang Ninh province wanted Rikolto to support them as Da Nang, or so did Bac Ninh province. But due to the limited resources, Rikolto has held the support until there are other funding sources.

Introduction of SRP started in 2018 which has shown positive results on the benefits. The adoption at production level would take place as soon as the farmers realized the benefits from applying the standards, which will take place in the last two years of the programme. A full SRP standard application with 41 criteria and large impact to the whole Mekong delta requires more effort of all actors, especially investment from private sector as the real market for SRP rice is yet to be

developed. As a staple crop mostly consumed by lower income countries, political commitment at both national and international levels is needed to bring about the transformation of the sector. Step by step, Rikolto is going to approach to tackle these various influencing factors.

To conclude, lessons learned include setting priority, choosing partners, evidence-based decision making and alignment. Prioritisation should be set taking into account government commitment, capacity of partners, and where synergies and complementary are possible. Implementation partner is critical for success as the right one, in addition to expertise, brings about engagement of all other stakeholders and ensures program continuity. While working on national issues aiming at policy advocacy, a long-term plan with clear strategy is critical for building a bulk of knowledge from carefully selected regions, and partners for policy is itself long-term. Strong systemic data gathering for evidence-based decision is another issue acknowledged as decisive as felt by the program management.

5. Exit strategy

For project partners to maintain or sustain project outcomes, taking into account the limited time and financial resources of the programme and constraints as analysed earlier, revised target indicators are presented in Annex 1 of this report.

Taking into account all lessons learnt above, the exit strategy will **set priorities, stay focus and narrowing down the number of partners**, investing where effective and efficient are seen in the programme. The programme will assess the cost benefit analysis, the **commitment of the partners** as well as **their capacity**. Partnerships that haven't shown effective and efficient collaboration to turn 1+1=3 will not be continued, such as FU in Vinh Phuc and An Giang. Partners that contribute to Rikolto's programme effectiveness and efficiency will be prioritised with to focus supporting in institutionalisation of the results (PGS in Hanoi for example) or scale up the pilot (such as SRP in Dong Thap). With other provinces, depending on the commitment of the partners, different options will be applied.

In vegetable sector, besides the impact of PGS adoption by Hanoi DARD with funding sources from the government, the whole process will be consolidated and documented with TOT training on PGS for partners and strengthening the inclusive business model by identifying enterprises who are interested in safe vegetables to facilitated market linkages for farmer organisation, support them in develop their business plans that fit to the demand side given by the enterprises. All success experiences from Hanoi will be shared with other provinces, primarily Vinh Phuc, Ha Nam and Da Nang.

In Vinh Phuc, exchange with Hanoi will be facilitated and advocate to integrate PGS into provincial application from 2021 will be put further effort in 2020, aiming at adoption of PGS either officially or unofficially by the government, providing they use their government budget to roll out, while Rikolto's role will be to develop technical guidelines and manual plus organise TOT training for partners. In Ha Nam, focus on one key farmer organisation to get sustainable inclusive business model will be worked on as a conducive environment is not yet available. Ha Nam promoted hi-tech in agriculture and therefore the government prefers to invest in these big companies.

FSC initiatives in Da Nang has inspired the Da Nang DARD and the Food Safety Management Board (FSMB) to explore further to collaborate with Rikolto in addressing food “import” from other provinces, food supply to schools and public kitchen. Quite a number of ideas have been presented by FSMB. However, with such ambition, Rikolto will work together with the partners in Da Nang to look for further support in addressing these issues. With limited budget from the current programme, Rikolto will continue to facilitate inclusive business model for farmer organization producing safe vegetables. The right pilot on this inclusive business model will open an opportunity for further expansion in Da Nang and other cities.

In the rice sector, effort will be invested in actual application of SRP in larger scale and quality through improving market linkages and incentives for higher SRP scores. Partnership with development partners such as GIZ and Oxfam will be lifted up from discussion to actual effort in engaging private and public sector under PPP in rice, moving towards an agreed National Chapter signed by all members in the PPP. Besides, action on gender and youth will be materialized. Further engagement of other enterprises who are committed to SRP will be explored, both for export and domestic markets. Collaboration with FAO started by the end of 2019 in providing recommendations and suggestions for their future involvement in SRR rice as well as alternative models such as fish-rice, duck-rice hopefully will be resulted in further effort of FAO together with Rikolto in the rice sector, not only in Vietnam but also at the international level.

From such strategy, an Action Plan is developed for the remaining 24 months of the programme as presented in Table 16 below:

Table 18. Action Plan

Level of support	Key actions/activities	Timeline (Month - M)
1. Resource/key persons	Reviewing the list of key/resource people who will keep the key set of knowledge and skills for further capacity building, or maintaining the project outcome	M0---M6
Leadership development	Assisting the key people/managers with missing or weak capacity by coaching or working together or individualized training, keeping in mind that women are key people in growing vegetables	M7---- M18
Networking of key persons	Assisting the key people from various project be connected in a network both online and off-line so that they can support one another in case of needs	M12-M24
2. Farmers' organization	Reviewing structural elements of organization if it is capable to maintain and develop further operations, revise the PGS principles, approach and methods in producing key product lines (vegetables): e.g., vision and mission of PGS, production processes (from inputs for storage), internal quality control, marketing, branding, access to credit,	M0---M6

	managerial processes.	
Institutional strengthening	Assisting FO in improving the identified weak spots by coaching and working together with focus on institutionalizing the processes that are important for a high-performing cooperative Assisting FO with networking with other like-minded cooperatives and NGOs, accessing technical support and/or financial resources in the industry or locality	M7---- M18
Supporting with knowledge resource	Checking/Making needed resource available online or in a local public library in a community; and introducing the resources to the concerned/relevant people.	M12-- M18
3. Business partners /support Institutionalization of the inclusive business relation	Checking if <ul style="list-style-type: none"> the business partner(s) strategy includes the cooperatives, farmers' organizations in the value chains the margin profit sharing is fair among the value chain actors 	M6-M12
Support institutions	Advocate for a fair set of code of conducts among whole-sale buyers or marketing partners participating in the value chain – develop National Chapter on SRP Further collaborate with partners and projects in the same areas such as GIZ, Oxfam and mobilize existing platform such as PPP on rice.	M6-M20
4. Government: partnership/policy	Keep track of government policies and programs supportive and inclusive to cooperative partners Inform government of the project successes and lessons Advocate for replication or transfer the PGS approach in new provinces, communities, localities.	M0-M24
	Advocate for inclusive agriculture development policy Document project experiences, evaluation and learning Share lessons and experiences	
5. Strategy management	Develop indicators for strategy monitoring Collect information, adjust strategic courses and actions	M0-M3 M3-M21 M21-M24

Annex 1: Suggested indicators and explanation for changes in target

Indicator	Baseline	Year 3	Year 5 (original 2021 target)	Revised 2021 target	Explanation for changes
Specific objective: Fruits, vegetables, and rice in Vietnam are produced in safe and sustainable ways and marketed through viable, competitive and efficient chains benefitting smallholder producers					
Indicator 1: Number of direct end beneficiaries					
Vegetables	548 81	650	1100	980	The baseline value (81) includes only Tu Xa and Trac Van. In 2016, we planned to work with several other FOs: Tu Vu (in Phu Tho), Van Hoi Xanh, An Hoa, Thanh Ha (in Vinh Phuc), La Huong, Tuy Loan, Ninh An (in Da Nang). However, as Phu Tho did not approve our project and other provinces (Vinh Phuc & Da Nang) approved the project late, we adjusted the baseline value (548 originally) and the target for 2021 accordingly.
Rice	800 0	3500	5400	1700	For the baseline value, it is 0 instead of the original figure 800 because Phu Tho didn't approve our project and An Giang joined the project late then. We adjusted the 2021 target

Indicator	Baseline	Year 3	Year 5 (original 2021 target)	Revised 2021 target	Explanation for changes
					because: (i) as mentioned above, Phu Tho province did not receive our project in 2018, and (ii) in the Mekong Delta where Rikolto works, the cooperatives have small membership and each farmer usually owns more than one ha of land.
Indicator 4: Number of indirect beneficiaries					
Vegetables: # household members [= # quality food producers * (average household size – 1)]	1568 234	1860	3146	1560	As the number of direct end beneficiaries for 2017 and 2021 is adjusted above, the corresponding number of indirect beneficiaries also changes.
Vegetables: Number of SOFF downloads	1588 243	10,000	30,000		This intervention stopped.
Rice: # household members [= # quality food producers * (average household size – 1)]	2288 0	10,010	15,444	6000	As the number of direct end beneficiaries for 2017 and 2021 is adjusted above, the corresponding number of indirect beneficiaries also changes.
Result 1: Inclusive, sustainable & safe food policies tackling safe vegetables production, consumption and marketing are implemented in Vietnam, including support for Participatory Guarantee Systems by the national government					
Indicator 4: Volume of PGS vegetables (tons) sold to	402.83 tons/year	2500 tons/year	4000 tons/year	8500 tons/year	After another year of supporting the farmer

Indicator	Baseline	Year 3	Year 5 (original 2021 target)	Revised 2021 target	Explanation for changes
markets (both individually and through FO)					organizations to implement their PGS, we have learnt that the buyers do not require a PGS certificate, but they need farmers to produce vegetables in a safe way. Therefore “PGS vegetables” in this indicator means “PGS-controlled vegetables”. In 2020, Rikolto will be working with more farmer organisations, therefore the target for 2021 is adjusted accordingly.
Indicator 5: Number and description of new or adapted policies that improve the enabling environment for inclusive safe vegetables production, marketing and consumption	0	Policies that expand the area dedicated to safe vegetables production; facilitate farmer groupings	Consumer protection policies explicitly tackle consumers’ right to safe food	Indicator removed	Rikolto discussed with its partners about the formation of a PGS safe vegetable network. We concluded that within a 5 year-programme, advocating PGS to be recognised at national level is not feasible. The workable structure would be a provincial PGS coordination board.
Number of policy recommendations formulated by the multi-stakeholder platform on safe vegetables that have been followed by the national government (cumulative)	0	0	2		
Number of policy	0	0	2		

Indicator	Baseline	Year 3	Year 5 (original 2021 target)	Revised 2021 target	Explanation for changes
recommendations made by Rikolto in Vietnam that are followed through by the multi-stakeholder platform on safe vegetables					
Indicator 6: Da Nang city adopts inclusive & sustainable food policies (look at cluster concept note)	Da Nang masterplan for safe vegetables by 2020	TBD more specifically. It will include policies in favour of short food chain initiatives; local food-support services, i.e. logistics, storage; transportation; adequate inclusion of safe agriculture in urban planning policies; support for safe production methods	TBD more specifically. It will include the development of a strategic plan for a sustainable & inclusive food system in Da Nang		New indicator(s) will be added after Rikolto meet up with Da Nang Food Safety Management Authority to discuss the way forward.
Result 2: Inclusive business models and sustainability standards are successfully scaled up and mainstreamed throughout the Vietnamese rice subsector					
Indicator 3: Number of farmers (F/M/Y) selling SRP-compliant rice to companies	0	500	1500	1500	We use this indicator because we want to measure the the companies' willingness to adopt SRP.