



Progress
Report and
Implementation
Plan

Tertiary Irrigation Technical Assistance

February 2017

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Acronyms

AIP-Rural	Australia-Indonesia Partnership for Rural Economic Development
ARISA	Applied Research and Innovation Systems in Agriculture
AUD	Australian Dollar
BAPPENAS	Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)
BUMDes	BUMD Desa = Village Company
DCED	Donor Committee for Enterprise Development
DFAT	Australian Government's Department of Foreign Affairs
DINAS	Dinas Pertanian dan Peternakan = Agricultural and Livestock Service Office
EJ	East Java
Gol	Government of Indonesia
HIPPA	Himpunan Petani Pemakai Air (Farmers' group on Irrigated land)
IP	Intervention Plan
ISD	Intervention steering document
ISF	Irrigation service fee
KPI	Key Performance Indicator
M4P	Making markets work for the poor
MIS	Management information system
MoU	Memorandum of Understanding
MRM	Monitoring and results measurement
MRM	Monitoring and Result Measurement
MTR	Midterm review
O&M	Operation and maintenance
PMC	Portfolio Management Cycle
PRIP	Progress Report and Implementation Plan
PRISMA	Promoting Rural Income through Support for Markets in Agriculture
S(BC)	(Senior) Business Consultant
SAFIRA	Strengthening Agricultural Finance in Rural Areas
SMEs	Small and Medium Enterprises
TIRTA	Tertiary Irrigation Technical Assistance
TL	Team Leader
WEE	Women's Economic Empowerment

Executive Summary

Following the MTR recommendations, TIRTA revised its strategy and consolidated its portfolio. The focus shifted from developing a diversified portfolio which favoured collaboration with HIPPA alone to partnering with investors/entrepreneurs, intermediary service providers and input suppliers. All interventions have been screened against the new strategy and re-designed accordingly with a formalised and strengthened intervention development process. The result is a consolidated portfolio of 10 interventions - 7 are with private investors, 1 is as a collaboration between a G-HIPPA and a private investor, 1 with a BUMDes and only 1 with a G-HIPPA. In addition more than 1,300 Ha have been profiled this semester against a cumulative target of 1,500 Ha – and 2 sites are expected to become new interventions during the next semester.

TIRTA's portfolio is currently comprised of 2 interventions with measured outreach, three where water is expected to flow by the end of the next semester and five where irrigation expansion is expected to start by the end of the next semester. The total targeted expansion from the ten interventions is 3,343 Ha by December 2018, with 9,431 projected beneficiaries (HH). The planned cumulative expansion to be completed before the end of semester one of the current year is ~1000 Ha against a target of 650 Ha.

TIRTA focussed on raising awareness and improving locally available irrigation technical capacity (ISPs). Technical and Economic feasibility plans have been developed for 3 programme-supported schemes, covering irrigation design and infrastructures improvement with the potential to serve over 1,200 Ha and recommendations shared with investors on irrigation pump station configuration for improved efficiency (energy/water) and infrastructures improvement both on site and during follow-ups. The exercise proved successful as some suggestions have been immediately adopted. As a first step to facilitate increased local technical capacity TIRTA developed Irrigation SOPs and surveyed irrigation agents to gauge their awareness and readiness to provide irrigation technical assistance. Whilst small businesses seem to have little appetite for integrating technical assistance and diversifying their offer, a number of market leaders in the irrigation space showed interest in collaborating with TIRTA, namely Torishima and Grundfos (pump suppliers) and Royal Haskoning DHV, an engineering consulting company.

In view of the higher returns which can stem from the integration of productivity enhancement into the irrigation business model, TIRTA partnered with Syngenta and irrigation providers to conduct crop protections trainings and developed a modular curriculum tailored to the needs of the target area. Trainings and demoplots have been particularly successful in Pilanggede, where Haji Achsin provided in-kind credit to 139 irrigation users and in Malo, where the G-HIPPA requested more trainings in the coming season to cover the irrigation expansion area. Furthermore, an agronomic assessment identified the farm practices most likely to increase rice yields in Bojonegoro and a modular curriculum has been developed and currently is being piloted to promote such GAPs to farmers through inputs supplier and irrigation providers.

- During the reporting semester, TIRTA has explored alternative business models with various degrees of collaboration between HIPPA and private sector. With limited scope to actively influence policy at this stage, TIRTA is testing a diversified strategy. On one side, TIRTA is facilitating the recently established G-HIPPA Piyak to make an agreement with an investor that will supply working capital and potentially supervise operations for a share of the output. As lack of working capital is an issue for virtually all newly established HIPPA and most of active ones, this model has high potential for impact and scale. On the other side, TIRTA has been investigating the market for capacity building services. Although HIPPA are conscious of their limitations and the benefits derived from improving their capacity, their willingness to pay for trainings and technical assistance is still very low. TIRTA is scoping sustainable options to improve the capacity of HIPPA whilst cultivating the demand for such services and will pilot a combination of activities to improve management capacity in Malo – peer learning activities with established HIPPA will be conducted in the next months.

Key performance indicators and progress

Outreach

TIRTA caught up with the significant delays and almost achieved its semester targets. Through two existing interventions, TIRTA benefitted 354 HH (258 HH <\$2.5 PPP), slightly less than the semester target of 400 HH as defined as by the target outreach trajectory. Based on the women to men and the individual farmers per smallholder HH ratios (validated at baseline) from the 354 smallholder HH, the number of female farmers that benefitted from the intervention is 341, and the number of male farmers is 402.

The expected cumulative outreach from the existing interventions is expected to be 468 HH (342 HH <\$2.5 PPP) – the additional outreach will be achieved through a second phase expansion in Pilanggede by an additional ~75Ha.

The projected outreach from existing and new interventions is 5,891 HH (4,300 HH <\$2.5 PPP) by the end of 2018. The 10,000 HH target by December 2018 could be achieved through the existing pipeline; yet, as a result of the time-lag in implementation and high risk of setbacks TIRTA will further nurture this pipeline in the next semester

Income

The outreach weighted average Net Attributable Income Increase is 94%, considerably higher than the 60% target set for the programme. The total NAIC value for this semester was of IDR 2,808,472,523 (AUD 208,847,25).

Other KPIs

TIRTA's performance against the other KPIs corroborates the positive outreach and NAIC suggesting the strategy and approach implemented so far fit TIRTA's goals.

Through its first three interventions (Pilanggede, Leran 2 and Malo) TIRTA stimulated private sector investment in irrigation for IDR 2,375,854,250 (AUD 237,585.42).

The average investment leverage from these three interventions is 3.5 which reflects the high commitment of TIRTA's partners.

Pilanggede and Leran 2 interventions are commercially viable; total value of additional partners' turnover is IDR 670,000,000 (AUD 67,000). The increased turnover is the result of an increase in hectares served by the irrigation providers in the first year of operation (2 seasons in Pilanggede, and 1 in Leran 2). A summary of the programme level KPIs is provided below.

KPI	Description	Actual cumulative Y16S2	Actual Y16S2
KPI1	# Outreach (all farm HHs)	354	354
KPI1a	# Outreach (<\$2.5 PPP)	257	257
KPI2	Net Income Impact in IDR (all farm HHs)	2,808,472,523	2,808,472,523
KPI2a	Net Income Impact in IDR (<\$2.5 PPP)	2,040,940,675	2,040,940,675
KPI3	Number of ISPs with increased turnover	2	2
KPI4	Additional increased turnover of ISPs in IDR	670,000,000	670,000,000
KPI5	# Number of Intervention	6	6
KPI6	Initiatives by Government to improve BEE	0	0
KPI7	# Intervention Partners (public & private sectors)	8	8
KPI8	Private Sector Partners co-investment in IDR	2,375,854,250	2,375,854,250
	Investment Leverage	3.5	3.5

Management response

While implementing all new interventions, strategic private sector engagement and the development of a strong pipeline will be dominating in the next months. Workshops with the first batch of investors have already started and will continue on a weekly basis to validate and follow-up on the commitment from the first 86 investors identified so far; additionally, TIRTA will engage with the rice miller association in Lamongan and if necessary sent out expressions of interest through the media (newspaper, radio or professional magazines).

TIRTA's offer will be better articulated and tailored to the local profiles while the low professionalisation of the sector should be increased through linkages with established service providers. TIRTA intends to market the technical and economic feasibility assessment through pump producers, who have existing brands along the Solo- Bengawan River and showed interested in collaborating with TIRTA such as Grundfos and Torishima. Similarly, productivity enhancement, either as an embedded or standalone service will be promoted through Syngenta and other agro-input providers.

The business models including HIPPA's will be revised and collaborations with the private sector promoted. At the inception of the programme, HIPPA's were considered as potential key actors in the dynamic for irrigation expansion. Many HIPPA's lack managerial and technical capacity, - which makes it difficult to fulfil this function at scale. HIPPA's however remain important stakeholder and not addressing their constraints would limit TIRTA's impact and the potential to scale up. As in general, private investors appear to be ready to work with HIPPA's that play a low profile role -, a consultancy is underway to assess existing business models and develop new ones. The need for specific "management development support" is also being assessed; if deemed necessary, the delivery modalities will be clarified in the next months.

TIRTA will focus on BEE to better align its strategy and avoid overlaps with government targeted areas, and to promote environmental safeguards. More active coordination with the local administration will be helpful in identifying investors, but also available land (topographically more complex) which the government might want to see developed by the private sector, and ultimately will serve to better select potential irrigation sites to eliminate as much as possible the risk of overlaps between TIRTA's and government initiatives.

1. Broader Policy, Institutional and Environmental Context

No major national or regional policies and regulations on irrigation have been introduced in the last six months. Both Ministry of Agriculture and Ministry of Public Works are involved in different capacity and roles in supporting the HIPPAAs. Special programs financing the construction of tertiary infrastructure facilities to be run by HIPPAAs are common and seem to be increasing. -

Public sector usually favours not-for-profit-community driven initiatives, but there is growing interest to embrace the private sector initiatives. The Bupati of Bojonegoro for instance seems to be encouraging a more open attitude towards the private sector; the head of the local Dinas of Public Works acknowledges the private sector's advantage for technically complex and riskier sites. TIRTA should capitalise on such openings to promote TIRTA's successful interventions as a proof and encouragement for the government audience that markets can benefit the poor.

The second semester of 2016 faced the onset of the La Niña effect after a long period of hot and dry climate caused by El Niño. The effect La Niña, such as increased rain intensity and lower temperature levels, has impacted various areas where TIRTA is working. Although La Niña is believed to benefit the Indonesian agriculture industry, it poses several risks such as floods, increased pest attacks and/or crop failure due to excessive rain. The major negative effect of La Niña experienced so far being a severe flood in December. TIRTA will continue to monitor La Niña's potential impact on interventions and incorporate specific considerations in the environmental assessments.

2. MTR recommendations

A Mid-Term Review (MTR) of the AIP-Rural portfolio (PRISMA, TIRTA, SAFIRA, and ARISA) was undertaken during September 2016. The team conducted document reviews; field interviews with 220 informants (26% women) in Jakarta, East Java, NTT and NTB; discussions with AIP-Rural staff in their Surabaya office; and meetings with officials from the Indonesian Government and from the Australian Embassy in Jakarta.

This MTR concluded that the AIP-Rural portfolio remains beneficial to both Australia and Indonesia given that agriculture represents a key source of jobs, incomes, exports and food security in Indonesia, and continued growth in Indonesia benefits Australia in terms of market growth, increased trade and greater regional stability. The MTR also determined that the systems used by the program – and the data captured and analysed within them – are robust and accurate, and that the core logic used for the PRISMA investment is working and that early signs in the three smaller projects echo these results.

Among various findings and lessons learned from the MTR, one of the main recommendations was to refine AIP-R's governance arrangements. Historical governance arrangements of the four portfolio programs were designed to manage upwards, rather than to facilitate delivery. Such arrangements were appropriate at inception. However, the changing context (e.g. integration of the aid program into DFAT) and performance during the first half of implementation require refined governance arrangements for the second half of implementation. Therefore, the MTR recommended that DFAT and its managing contractor (Palladium) negotiate new arrangements that reflect the head contract as well as opportunities for simplification, such as evolving towards one administrative system, one integrated progress report for all AIP-Rural components managed by Palladium, and one whole-of-program portfolio review process.

As a response to these recommendations, a revised AIP-R governance structure was designed and approved by DFAT. This new structure was designed in such a way that aims to:

- Achieve greater management efficiencies especially between the three Palladium-managed projects (PRISMA, TIRTA and SAFIRA) and ARISA by establishing a new management structure;
- Create clearer lines of accountability between the Contractor Representative, the new management structure and the DFAT Rural Unit; and

- Establish new and workable communications protocols between the Contractor Representative, the new management structure and the DFAT Rural Unit

TIRTA actively addressed programme specific recommendations from the MTR: with the new leadership and implementation staff, the HIPPA centred approach shifted towards stimulating private sector investment; Synergies with PRISMA so far have emerged through the new governance structure and cover operation, finance and the MIS, whereas the following semester will look at programme implementation strategies; the programme will focus on EJ, and specifically Bojonegoro, Tuban and Lamongan districts.; and finally the capacity of new and existing TIRTA staff has been addressed through ad-hoc trainings and coaching – more details can be found in the Personnel Management section.

One of the main changes of the new governance arrangements was the dissolution of the Secretariat, and many of its former responsibilities –semester target setting (output/outcomes) and oversight of TIRTA and PRISMA, the MIS and the compilation of ADRs -- were folded into program management. Other responsibilities – such as overall program oversight, SRP missions, MTR arrangements, comments on strategies, PRIPs, PPAs, APAs and GoI relations – became fully the responsibility of the DFAT Rural Unit. The other major change of the revised structure was the elevation of PRISMA's former Team Leader to General Manager of PRISMA and the entire AIP-R portfolio integrated MRM system. The new governance arrangements also included the addition of a Deputy General Manager to provide additional oversight to TIRTA and SAFIRA as well as some of the common services (MIS, Communications, and Operations & Finance). In the diagram below, the responsibilities of the General Manager and Deputy General Manager (depicted below as Palladium AIP-R General Manager 2) correspond with the lighter and darker shading:

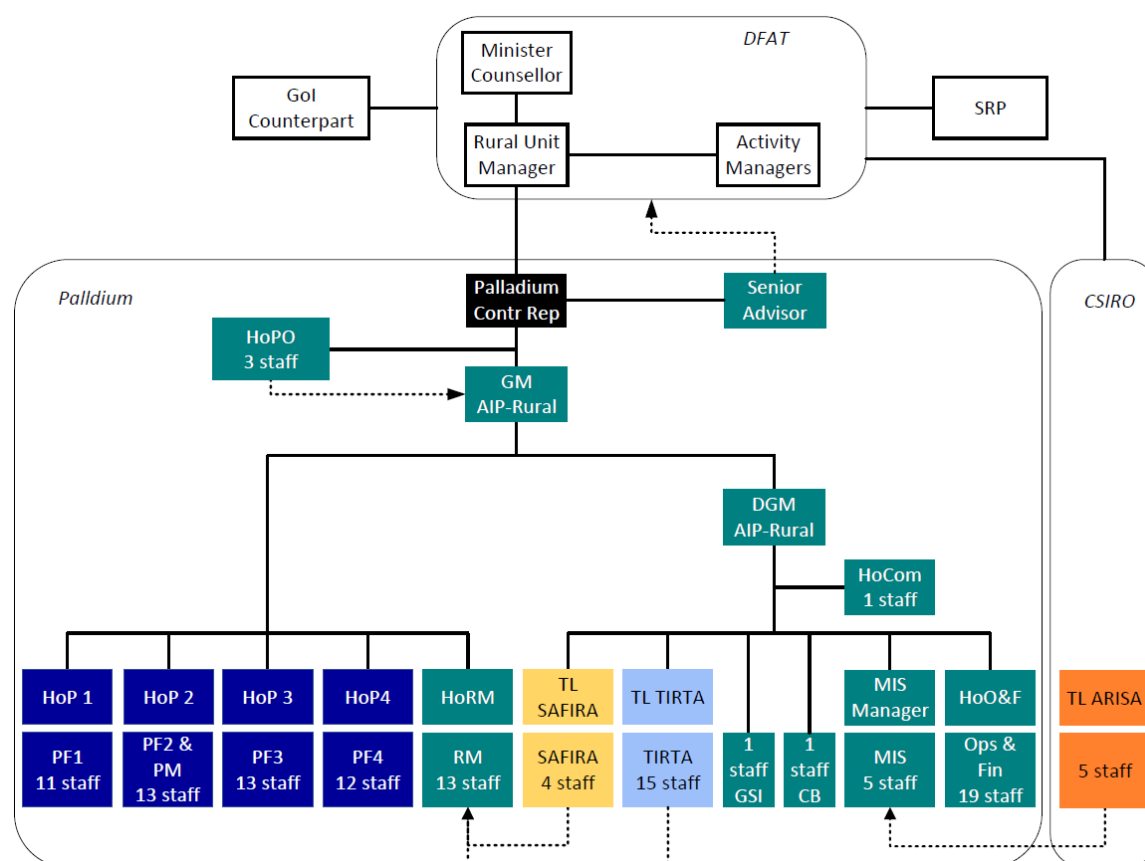


Figure 1: Revised AIP-R Governance

Implications for TIRTA:

- **Streamlined oversight:** Prior to the MTR, the governance of the four AIP-Rural programs and the reporting structure made day-to-day operations confusing and inefficient. During the first year of operations, TIRTA's Team Leader received either formal or informal oversight from up to eight

different people (3 Palladium Technical Advisors, 1 SwissContact Technical Advisor, 2 Secretariat members, 2 DFAT officers), which led to frustration and inefficiency for them and their staff. This was mainly due to the complicated structure of the entire AIP-Rural program. However, the supervision burden on TIRTA has been greatly reduced and clearly defined with the new governance structure, and clear management and communication protocols have been established and agreed to for all relevant stakeholders. It is anticipated that this will greatly improve transparency, efficiency, and morale moving forward.

- **Management and resourcing:** Under this new structure, the TIRTA Team Leader is currently reporting to the contractor representative and will ultimately report to the DGM after a transition period, expected to the end in June/July. These revised governance arrangements facilitate easier reassignment of AIP-R project staff across various portfolio programs. For example, when it was identified that TIRTA was suffering from short-term inadequacies of experienced market development personnel, a Senior Business Consultant from PRISMA was deployed to support the documentation of the portfolios of interventions in TIRTA from April to September 2016. In addition, the SAFIRA and TIRTA MRM system has been entirely integrated into PRISMA's. TIRTA's and SAFIRA's MRM Managers now report to both their respective Team Leader and the AIP-R Head of MRM. This assures consistent monitoring and reporting, while also promoting more knowledge sharing across the different portfolio programs.
- **Corporate identity:** TIRTA staff now sees AIP-Rural as one integral identity and TIRTA as unique elements/subsets within AIP-Rural.
- **AIP-Rural CMT:** The PRISMA Core Management Meeting (CMT) meeting every Monday will be expanded, and now TIRTA staff participate.
- **Monthly update:** Discussions on key progress, issues, and plans emerging from the expanded CMT have been consolidated into an integrated monthly update for submission to DFAT.
- **Integrated work space:** To facilitate closer day-to-day interaction between project teams, all implementation teams will be sitting on the first floor. TIRTA MRM personnel have a much closer link to the former PRISMA MRM team, and a new seating plan has been developed so that TIRTA's MRM Manager now sits with all AIP-R staff.
- **Joint portfolio review:** Every semester, all projects will have a joint portfolio review so that TIRTA staff can better understand what PRISMA and SAFIRA are doing and learning, and to identify collaboration opportunities where appropriate. The QMT (Quality Monitoring Tool) developed by PRISMA has been introduced and is now being adapted and applied to TIRTA. The first joint portfolio review took place at the end of November. TIRTA used the QMT tool to explain the latest developments of its sector to the CMT and present one intervention.
- **Cross-project services:** PRISMA's Operation and Finance team now provides services to all three Palladium projects, including TIRTA, using one integrated system led by the Head of Operations and Finance. The MIS and Communication teams will continue render their services to all projects.

3. Portfolio Management

3.1 Portfolio Development Progress

Following the MTR recommendations, TIRTA refined the intervention selection criteria in line with the revised programme strategy and consolidated the existing portfolio. The original strategy focussed on developing a diversified portfolio and favoured collaboration with HIPPA's alone as opposed to catalysing private sector investments in tertiary irrigation. As such, the approach proved ineffective and led to significant delays, TIRTA revised the programme strategy and shifted the focus towards investors/entrepreneurs, intermediary service providers and input suppliers. All interventions have been screened against the revised strategy. As a result, TIRTA consolidated the current portfolio and refined 10 total interventions – 7 are with private investors, 1 is as a collaboration between a G-HIPPA and a private investor, 1 with a BUMDes and only 1 with a G-HIPPA alone. The latter is deemed to have high potential and can yield critical insights.

TIRTA formalised the intervention development process and caught up with the cumulative targets. At the end of last semester TIRTA had only developed one intervention concept note and one intervention plan, which meant that notwithstanding significant interactions with various stakeholders all interventions but Pilanggede were proceeding with no analysis, commitment from the partners, plan

and monitoring. The team formalised the intervention development process and developed 10 Intervention Concept Notes, 5 Intervention Plans, signed 3 additional MoUs and developed 4 ISDs. In addition, more than 1,300 Ha have been profiled this semester against a cumulative target of 1,500 Ha. As TIRTA's targets are more sensitive to the number of new hectares served rather than the number of sites Figure 2 below summarises the intervention development status using hectares as reference¹.

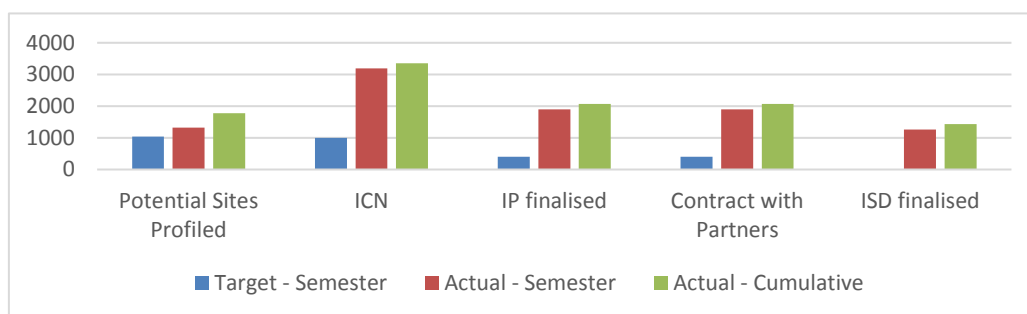


Figure 2 TIRTA Intervention Development

The development and use of the Portfolio Planner Tool was key to accelerate the progress of intervention development and effectively adjust the allocation of resources across the portfolio.

The absence of intervention concept notes and plans was exacerbated by the lack of processes to monitor the progress of each intervention, which contributed to the overall delays in implementation, the substantial time-lag between each step of intervention development and the sub-optimal allocation of resources across the portfolio. TIRTA addressed the issue by developing a tool to weekly monitor the progress of each intervention, which requires the intervention and tasks managers to weekly update the status of their interventions and actions for the coming week(s), and is reviewed by the team and TL at the beginning of each week. A snapshot of the Portfolio Planner tool can be found in Annex 5.

The next semester will focus on nurturing the pipeline. TIRTA's experience shows that multiple (sometimes unforeseeable) constraints are likely to hamper the progress of the interventions and obliges the management to replace the intervention. A sound set of 'pipelines' should be available to replenish the batch under scrutiny. Potential sites will be sourced through a series of promotional workshops with investors, complemented with requests for applications and similar workshops at the District level, predominately in Tuban and Lamongan. The Dinas will be approached to scope and profile inactive HIPAs that ceased operations but still have access to infrastructures that likely need improving and/or refurbishing.

3.2 Portfolio Progress and Analysis

Irrigation Technical Assistance

TIRTA raised awareness and improved the technical capacity of partner investors and HIPAs through the development of technical and economic feasibility plans for 3 programme-supported schemes, covering irrigation design and infrastructures improvement with the potential to serve over 1,200 Ha. TIRTA's strategy for the past semester has focussed on improving the team's experience and understanding while directly supporting partners with technical solutions to common engineering issues. Each investor received guidance on irrigation pump station configuration for improved efficiency (energy/water) and infrastructures improvement both on site and during follow-ups. The approach proved successful in raising awareness regarding the value of technical and economic assessments and the related gains in terms of lowered risks and increased cost-efficiency. Indeed, most recommendations have been accepted by the investors and some have been immediately adopted, such as the *quick-fixes* to the irrigation infrastructures in Leran 2 and Leran 1 which led the expansion of 30 and 120 hectares respectively, and the more complex re-design of the expansion in Malo which will be completed before the beginning of the next dry season. These schemes are used as

¹ The semester targets are based on the assumption that, on average, each site would be approximately 100 hectares.

demonstration sites to promote best practices in irrigation design and O&M through on site visits and written material.

As a first step to facilitate increased local technical capacity TIRTA developed Irrigation SOPs and surveyed irrigation agents to gauge their awareness and readiness to provide irrigation technical assistance. A “Pump station Configuration and Performance Efficiency Guidance” was developed by Stuart Higgins’ team, translated and adapted by a local irrigation specialist, to highlight the most common technical inefficiencies in different pumping configurations and their impact on operations cost or on reduced yields, with short ‘infographics’ on these inefficiencies and how to fix them. The team surveyed local irrigation agents, such as small repair firms, pump providers and operators to identify the actors that are best placed to deliver technical assistance and implement the SOPs, in terms of their existing capacity and commitment. While small businesses seem to have little appetite for integrating technical assistance and diversifying their offer, a number of market leaders in the irrigation space showed interest in collaborating with TIRTA, namely Torishima and Grundfos (pump suppliers) and RoyalHaskoningDHV, an engineering consulting company. Furthermore TIRTA identified a local pump operator in Tuban who is currently providing technical assistance to other schemes. This is of great interest for TIRTA as it suggests that investors and HIPPAAs can be willing to pay for technical assistance and that examples of irrigation agents exist in the targeted areas, albeit on a small scale.

The next semester will see the promotion of technical assistance solutions to key stakeholders in the value chain to increase awareness and stimulate demand, while supporting the supply through capacity building and business development. Workshops with investors have already started which seek to stimulate the demand for more sophisticated irrigation design and infrastructure improvement.

Productivity Enhancement

Increasing the productivity of the farmers makes great sense for the crop sharing business model commonly adopted by irrigation providers. The higher the productivity, the higher the value of the irrigation service fee and the lower the risk to be borne by the irrigation provider (which pays upfront for the infrastructures and the operation of the irrigation service). Therefore, TIRTA seeks to stimulate productivity enhancement, either as an embedded service from irrigation providers, or by increasing and improving the service of agribusinesses in TIRTA’s targeted areas and beyond.

TIRTA partnered with Syngenta to conduct training in productivity enhancing practices (crop protection) in Pilanggede, Malo and Leran. The trainings and demoplots promoted the appropriate adoption of pesticides, and in particular, the Gromore package and reached 377 farmers. As a time-lag of at least one season is expected before farmers change practices, TIRTA measured the impact of crop protection only in Pilanggede. Here, although the training was not successful in stimulating the full adoption of the Gromore technology, it significantly improved farmers’ knowledge on crop protection and appropriate adoption with positive results on increased productivity. In Pilanggede the irrigation provider, Haji Achsin, boosted adoption further by providing in-kind credit to 139 irrigation users – yet most credit recipients were hit by a severe flood and lost the majority of their harvest annulling the effect of improved crop protection. The trainings in Malo have also been successful and farmers in the area requested more trainings in the coming season to cover the irrigation expansion area.

Meanwhile an agronomic assessment identified the farm practices most likely to increase rice yields in Bojonegoro and a modular curriculum has been developed and currently being piloted to promote such GAPs to farmers through inputs supplier and irrigation providers. Poor planting, organic matter and water management are the main factors leading to low rice productivity in Bojonegoro. TIRTA’s agronomist assessed Syngenta’s Gromore against these findings and proposed one complementary session on organic matter management (from the modular curriculum) – which can increase the effectiveness of crop protection enhance sorption, thus reducing leaching of pesticides in the soil and decrease the risk of water pollution. This is currently being piloted in Malo and if successful will be replicated across all Syngenta’s demosites/trainings in April. An additional modular session on water management is conducted with farmers and the G-HIPPA on the same sites, as improved water management is expected to increase productivity and halve the volume of water commonly used, resulting in cost-efficiency and potential for expansion using the existing pump capacity. Depending on the success of these first pilots and Syngenta’s commitment there are two possible scenarios for next

semester: one in which Syngenta can integrate organic matter management in their training and replicate the curriculum piloted in Malo in other locations (likely Piyak, Kemiri and Leran 1); alternatively TIRTA will promote the modular curriculum (with or without Syngenta crop protection) in Leran 1 and Kemiri where the investor is expected to contribute towards the activity costs.

Irrigation Management

Despite the advantages that can stem from partnerships between HIPPAAs and the private sector both parties are often reluctant to collaborate – the main causes being the high perceived risk from the investors of hostile takeovers, lack of awareness and the capacity to enter the negotiations and secure enduring agreements. The classic attitude of distrust towards the trader and middlemen considered as preying on the farmers is still deeply ingrained with the administration. This leads not only to a misconstrued need to “protect” the farmer against collaboration with private investors but also to a perceived obligation to help the farmer with subsidies and special programs. -

Whilst private sector led investments remain TIRTA’s primary focus, overlooking HIPPAAs dynamics to solely focus on private sector established irrigation schemes would hamper TIRTA’s potential to scale-up and catalyse systemic change. With limited scope to actively influence policy at this stage, TIRTA will utilise the existing resources allocated to the live interventions with HIPPAAs and wider BEE (one SBC), and to a limited extent STTA, to implement a diversified strategy.

On one side TIRTA will actively facilitate and promote partnerships between HIPPAAs and private investors in line with the business model envisioned in TIRTA’s design. Although reluctant to collaborate with less efficient but active HIPPAAs, local entrepreneurs showed interest in providing working capital investment (even at low interest rates or profit shares). As lack of working capital is an issue for both virtually all newly established HIPPAAs and most of active ones, this model has high potential for impact and scale. As a first pilot for this business model, TIRTA selected Piyak, a recently established G-HIPPA that has received the main irrigation infrastructure from the Department of Agriculture but has not secured sufficient working capital to operate the system. In addition, TIRTA is planning capacity building activities for the G-HIPPA covering financial management and O&M – this will likely see a combination of more formal training (TIRTA is discussing a partnership with Agriterra²), exposure visits to established and successful HIPPAAs (LOA signed with Klotok and Tirto Tinoto) and supervision from the investor. Improved management capacity is expected to increase the returns for the investors and the sustainability of the G-HIPPA.

On the other side, TIRTA is investigating the market for capacity building services. Although HIPPAAs are conscious of their limitations and the benefits derived from improving their capacity, their willingness to pay for trainings and technical assistance is still very low. TIRTA is investigating sustainable options to improve the capacity of HIPPAAs whilst cultivating the demand for such services. Since big size schemes are more sensitive to these opportunities, TIRTA has integrated an irrigation management component in Malo. This will serve to increase awareness and stimulate demand and will also support the success and scale of the intervention per se, as the Phase 3 expansion is contingent to the G-HIPPA becoming self-sustaining and having enough reserves to invest in additional infrastructures. Options for capacity building include formalised training and exposure visits (as in Piyak), and to stimulate the formalisation of peer learning across HIPPAAs through which established HIPPAAs can serve as a resource from which weaker HIPPAAs can seek information and advice, and potentially comprise secondments of specific staff in critical periods.

As a first step to improve TIRTA’s understanding and build the basis for these initiatives, TIRTA conducted an irrigation management action research to identify the crucial success factors. The management structure, functions and operations of two successful HIPPAAs, Klotok and Tirto Tinoto, have been assessed to develop a benchmark for good irrigation management practices. G-HIPPA Piyak and Malo have been subsequently assessed against these benchmarks to identify the weakest areas and facilitate tailored capacity building.

² Agriterra is an NGO that strengthens cooperatives by using cooperative expiring and peer-to-peer advice from its top agri & food sector.

No.	Intervention	Target Expansion (Ha) by Dec 2018	Projected beneficiaries (HH) by Dec 2018	Partner	Partner Investment in Assets	Status/Expansion expected start date
Existing Interventions						
1	Pilanggede	170	400	Haji Achsin	IDR 1,371,785,000 (75%)	Started - Ending in February
2	Leran 2	30	50	Pak Kusnadi	NA	Completed
Tot		200 Ha	450 HH			
New Interventions						
MoU Signed – Water flowing before end of Y17S1						
3	Malo	535	1,529	G-HIPPA	IDR 911,244,250 (70%)	Started – First 285 Ha completed before end of March
4	Kemiri	400	1,143	Haji Arifin	IDR 3,047,500,000 (80%)	Expected March/April (400Ha)
5	Piyak	551	1,574	G-HIPPA/ Pak Untung (TBC)	IDR 884,950,000 (69%)	Expected April/May (221 Ha)
Tot		1,496 Ha	4,246 HH			
Cumulative Tot		1,686 Ha	4,696 HH			
Construction expected to start before end of Y17S1						
6	Leran 1	700	2,000	Haji Arifin	TBD	Expected July 2017
7	Leran 3	150	429	Pak Pawitnar	TBD	Expected July 2017
8	Bakalan	155	443	(Haji Maksum) TBC	TBD	Expected July 2017
9	Kanten	240	686	Pak Samsul	TBD	Expected July 2017
10	Kedungprimpen	412	1,177	BUMDES	355,700,000	Expected July 2017
Tot		1,657 Ha	4,735 HH			
Cumulative Existing and New		3,343 Ha	9,431 HH			
Pipeline						
11	Ngoken	76	217	TBD	TBD	Expected 2017 S2
12	Pucang Arum	130	371	TBD	TBD	Expected 2017 S2
Pipeline Tot		206 Ha	588 HH			
Cumulative Tot		3,549 Ha	10,019 HH			

Table 1TIRTA portfolio summary

3.3 Key Performance Indicators and Projections

Outreach³

3 Outreach or Benefit for TIRTA is defined as the number of smallholder households which experience a positive Net Attributable Income Change from using the new/improved irrigation and/or productivity enhancement.

Through two existing interventions, TIRTA benefitted 354 HH (258 HH <\$2.5 PPP) in the second semester of 2016, slightly less than the 400 HH target defined by the target outreach trajectory:

304 smallholder households (HH) in Pilanggede have experienced higher incomes as a result of a combination of access to irrigation and productivity enhancement facilitated by the programme. Specifically, 139 HH increased their income through access to improved irrigation, 119 HH from access to crop protection training and/or in-kind credit which led to an increase in their productivity, and 46 HH from both access to irrigation and crop protection. The impact of the intervention is lower than forecasted, as 80% of the farmers that received in-kind credit have been significantly hit by the flood and harvested considerably less compared to the unflooded farmers. Based on the women to men and the individual farmers per smallholder HH ratios (validated at baseline) from the 304 smallholder HH, the number of female farmers that benefitted from the intervention is 293, and the number of male farmers is 345.

50 smallholder households in Leran 2 have experienced higher incomes as a result of access to irrigation facilitated by the programme. Based on the women to men and the individual farmers per smallholder HH ratios validated during the impact assessment, from the 50 smallholder HH, 48 female farmers and 57 male farmers have benefitted from the intervention.

With regards to irrigation the access to use and use to benefit ratios are both 100%, meaning that all farmers that had access to irrigation used it and experienced increased incomes.

The IA in Pilanggede revealed that Access⁴ to Use⁵ ratio of Syngenta crop protection is 90%, meaning that both the in-kind credit and the trainings have been successful in improving farm practices. The Use to Benefit ratio⁶ is 60%; however, the effect of the floods on productivity is statistically significant, meaning that the benefit would have likely been higher under *normal* circumstances.

	Pilanggede		Malo	
	Female	Male	Female	Male
Access	211	293	63	119
Use	192	226	/	/
Benefit	115	135	/	/

Table 2 Access use and benefit of Syngenta crop protection package

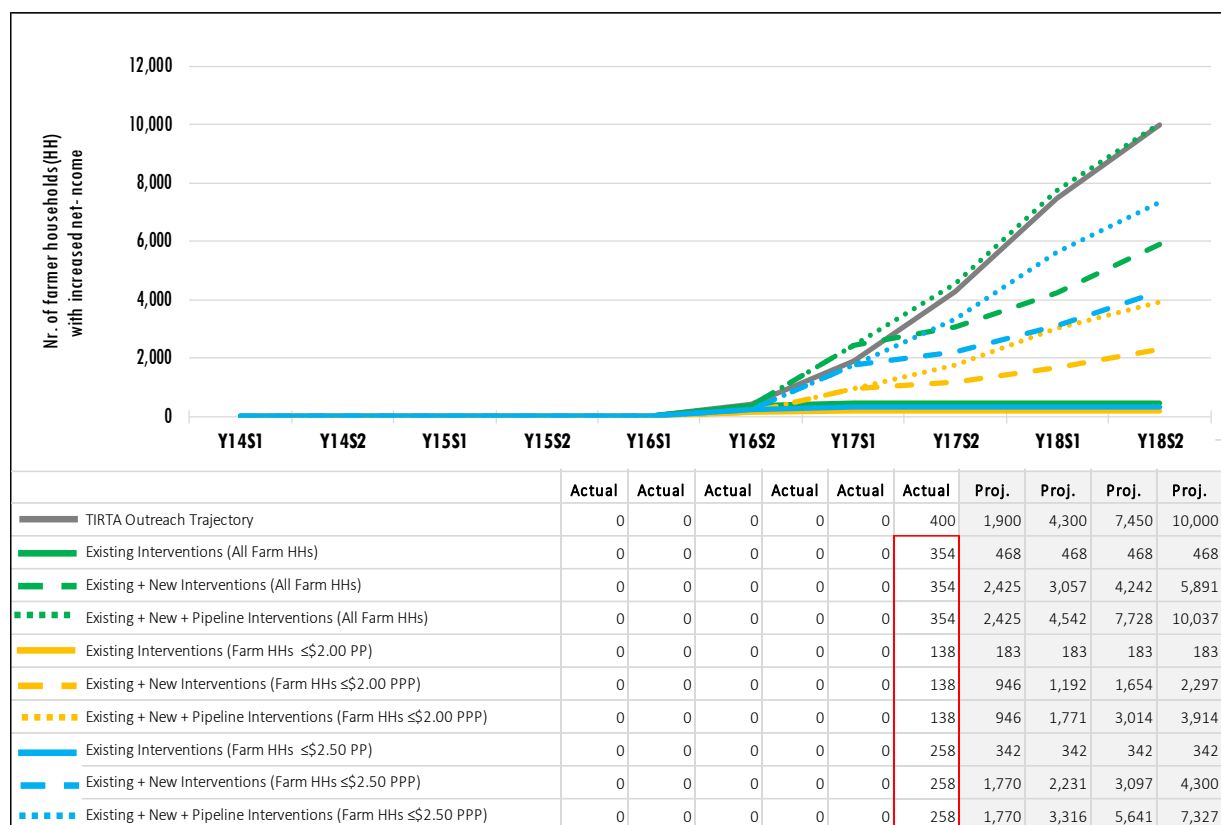
Details on all interventions can be found in Annex 1.

The expected cumulative outreach from Pilanggede and Leran 2, the two existing interventions, is projected to be 468 HH (342 HH <\$2.5 PPP). The additional outreach will be achieved through a second phase expansion of the irrigation system in Pilanggede covering an additional ~75Ha which will lead to an additional outreach of 114 smallholder HH. Such outreach exceeds what forecasted in the intervention design due to an additional 25Ha covered by the irrigation expansion and the positive impact on farmers' productivity of the promotion of the Gromore crop protection package by Syngenta coupled with in-kind credit from the irrigation provider.

⁴ Access is defined as the number of farmers who have agreed to the irrigation terms of service with the irrigation provider (TIRTA partner) who has initiated the irrigation expansion/improvement process; and/or as the number of farmers who are aware of the benefits of a new/improved input or service (for example attended, a partner-sponsored exposition, demonstration plot, or a training) are within the market area of a TIRTA partner.

⁵ Use or Adopt is defined as number of farmers having used new/improved irrigation during the production cycle from an intervention partner; and/or the new/improved good or service from a vendor who has been supplied by an intervention partner.

⁶ The Use to Benefit ratio indicates how the change in practice e.g. use of irrigation, use of crop protection translates into increase in income.



The projected outreach from existing and new interventions is 5,891 HH (4,300 HH <\$2.5 PPP) by the end of 2018. The 10,000 HH target by December 2018 could be achieved through the existing pipeline; yet, as a result of the time-lag in implementation and high risk of setbacks TIRTA will further nurture this pipeline in the next semester.

Income

The outreach weighted average Net Attributable Income Increase is 94%, considerably higher than the 60% target set for the programme. The total NAIC value for this semester was of IDR 2,808,472,523 (AUD 208,847,25).

In Pilanggede the weighted average NAIC is 98% for 304 smallholder HH, and the total NAIC value is IDR 2,500,330,300 (AUD 250,003.30). Specifically, farmers who access and used both irrigation and improved crop protection are those who experienced the highest NAIC (+ 153%), followed by the smallholder HH which used irrigation but did not change their crop protection practice (+148%), and finally those that only adopted improved crop protection (+ 19%). Irrigation is the main contribution factor farmers' income increase, productivity enhancement alone also proved beneficial despite the negative effect of the floods.

As per Leran 2, the total NAIC⁷ value for smallholder farmers who have accessed and used irrigation is IDR 308,142,223 (AUD 30,814.22) or 71%

Other KPIs and Value for Money

⁷ The NAIC was calculated using Before and After Comparison with Opinion (BAC-O); the sample was randomised using irrigation users lists.

TIRTA's performance against the other KPIs corroborates the positive outreach and NAIC suggesting the strategy and approach implemented so far fit TIRTA's goals. An overview of the critical KPIs is provided below.

Through its first three interventions (Pilanggede, Leran 2 and Malo) TIRTA stimulated private sector investment in irrigation for IDR 2,375,854,250 (AUD 237,585.42).

Pilanggede and Leran 2, the two irrigation schemes facilitated by TIRTA, are commercially viable; total value of additional partners' turnover is IDR 670,000,000 (AUD 67,000). The increased turnover is the result of an increase in hectares served by the irrigation providers in the first year of operation (2 seasons in Pilanggede, and 1 in Leran 2). The value of additional turnover will increase further as the irrigation providers keep expanding.

Besides investment leverage, the other value for money indicators are also positive, although the SROI in Pilanggede was negatively affected the severe floods.

	Pilanggede	Leran 2	Weighted
Investment per farmer	100.4	100	100.37
SROI	8.19	6.16	7.9

Table 3 Investment per farmer and SROI

The table below summarises TIRTA's performance against all KPIs.

KPI	Description	Actual cumulative Y16S2	Actual Y16S2
KPI1	# Outreach (all farm HHs)	354	354
KPI1a	# Outreach (<\$2.5 PPP)	257	257
KPI2	Net Income Impact in IDR (all farm HHs)	2,808,472,523	2,808,472,523
KPI2a	Net Income Impact in IDR (<\$2.5 PPP)	2,040,940,675	2,040,940,675
KPI3	Number of ISPs with increased turnover	2	2
KPI4	Additional increased turnover of ISPs in IDR	670,000,000	670,000,000
KPI5	# Number of Intervention	6	6
KPI6	Initiatives by Government to improve BEE	0	0
KPI7	# Intervention Partners (public & private sectors)	8	8
KPI8	Private Sector Partners co-investment in IDR	2,375,854,250	2,375,854,250

Table 4 Programme level KPIs

3.4 Challenges and lessons learnt

While TIRTA has been successful in catching up with the significant delays and has almost achieved the programme's targets to date, the pipeline and partners engagement necessarily suffered from insufficient dedicated resources. The pool of investors TIRTA has been engaging with is too small and not sufficiently diverse. Although the team identified over 80 potential investors, the past months exclusively focused on a small group of existing irrigation providers and has neglected interactions with the wider group. Although their personalities, incentives and capabilities are very different, which allows for greater breadth and depth across interventions, partnering with a larger number of diverse actors will ensure greater potential for scale and impact and lower the risks.

Although most irrigation providers seem to appreciate the potential of more sophisticated technical planning and delivery they are not sensitive to innovation and experimenting diversified business models. Technical and economic feasibility studies as well as the integrated promotion of productivity enhancement have spurred the interest of most investors, but have not

triggered an immediate request to facilitate the provision of such services. The new strategy bringing the business model(s) back to the service provision level has refocused the attention on the real market triggers. However, the challenge is not only to identify which services to develop but also how they are best delivered and by whom.

The strategy of focusing on facilitating the “Investor-HIPPA” model as envisaged in the programme design proved more complex than expected. Although there are indeed multiple successful schemes that demonstrate the potential of this model, both parties (HIPPA and investors) are often reluctant to enter partnerships as discussed in Section 3.2. The exception being HIPPAAs that resort to the private sector as the lack of working capital and reserves for maintained and repairs forced them to cease operations. The team learnt that investors are relatively less hesitant to explore the possibility to invest in inactive HIPPAAs rather than HIPPAAs that are currently running.

Irrigation expansion often requires the construction and or the installation of infrastructure which causes a natural time-lag of an estimated 4 moths from contract to finalised construction. This is especially true when TIRTA co-invests. The lack of internal technical engineering knowledge further delayed the implementation of some schemes, yet the hiring of a senior business consultant with a background in engineering and the new-governance structure seem to have already sped up and improved TIRTA's processes and performance.

3.5 Management Response

While implementing all new interventions, strategic private sector engagement and the development of a strong pipeline will be dominating in the next months. Meetings with the first batch of investors have already started and TIRTA will continue to validate and follow-up on the commitment from the first 86 investors identified so far, and to encourage them to refer peer investors in view of the possibility to develop multi-investors schemes. TIRTA will soon engage with the rice miller association in Lamongan both to identify additional schemes and to scope integrated business models with millers and processors. Finally, TIRTA will seek to improve and increase the intensity of interactions with local authorities to increase the knowledge on the sites that will receive subsidies and their perception of the role of the private sector. In addition, with a well-rounded offer and better defined audience, TIRTA will diversify its approach to partners' identification by improving the marketing of its presence through local media (newspaper, radio or professional magazines). This is expected to accelerate the process and scale-up, and significantly reduce the resources required to pursue the *opportunistic approach* implemented so far.

TIRTA's offer should be better articulated and tailored to the local profiles while the low professionalisation of the sector should be increased through linkages with established service providers. When promoting its technical and economic feasibility studies, TIRTA will have to develop better messages. It has to better explain to its target groups, i.e. special categories of investors, how and how much technology can impact on their operation cost and increase efficiency. Based on pilot demonstration sites and TIRTA's success stories TIRTA will be able to improve these messages. TIRTA should as quickly as possible identify service providers to channel the technical support services and the management services. As the new private investors (and the irrigation sites) are expected to be smaller than in the present on-going interventions, TIRTA can't be expected to handle them with in-house support or even external consultants under the supervision of the TIRTA staff. Hence, TIRTA will need to create leverage through alliance with larger service providers. TIRTA intends to market the technical and economic feasibility assessment through pump producers, who have existing brands along the Solo- Bengawan River:

- Pump producers / suppliers; who can conduct pump audits like Torishima and Grundfoss but can also highlight potential expansion opportunities and subsequently identify potential investors. TIRTA will closely monitor the audits performed by these companies.
- Input suppliers; as long as the payment for access to irrigation water is through harvest sharing, the agro-input providers are also potential sources of information about potential investors or land ready for expansion. TIRTA will increase its interaction with its input suppliers like Syngenta on the subject

The business models including HIPPAAs will be revised and collaborations with the private sector promoted.. As in general, private investors appear to be ready to work with HIPPAAs that play a low profile role (or no role at all), a consultancy is underway to assess existing business models and develop new ones. The need for specific “management development support” is also being assessed; if deemed necessary, the delivery modalities will be clarified in the next months. -

As the private sector is more inclined to consider partnering with or taking over HIPPAAs that are inactive, this area will be further explored through FGDs with HIPPAAs and private sector irrigation providers to assess what are the inhibiting factor which are preventing this business model to reach scale and what are the enablers TIRTA should focus on. One common denominator appears to be the inadequacy and weak enforcement of contracts regulating the irrigation provision, meaning that irrigation service providers are exposed to the high risk of *hostile takeover* usually by the village administration and therefore reluctant to invest in such schemes. The capacity of HIPPAAs and to a lesser extent the private sector to negotiate and formalise the irrigation service terms and conditions seem to also hamper the process.

TIRTA will focus on BEE to better align its strategy and avoid overlaps with government targeted areas, and to promote environmental safeguards. Following the MTR recommendation, TIRTA has focused on the implementation of the planned interventions essentially supporting the private investor. The team will seek to foster more active coordination with different government programmes which directly affect tertiary irrigation such as JITU, JIDES, or pump distribution – this expected to avoid overlaps with government targeted area, and may aid to the identification of available land (topographically more complex) which the government might want to see developed by the private sector. The implementation of the Environmental Impact Assessment will also increase the relationship with the local environmental offices of Bojonegoro, Tuban and Lamongan. It is expected that these relationships will allow TIRTA to exchange more information and support from the local Dinases. Interactions between TIRTA and the local government related to the environmental safeguards may also may yield opportunities to build their capacity and increase their exposure to environmental risk management and/or water management.

The procurement process for infrastructure development must be honed. As TIRTA overhauled its core team and as its OPS staff were transferred to be incorporated in the AIP-OPS it appeared that the development of irrigation infrastructure had been underestimated. Besides the fact that pump-lift irrigation engineers are difficult to recruit, the construction of simple canals still require knowledge in civil construction with requirements on design, planning and all the related tenders for the subcontracting and the material. The existing knowledge within the team and the procurement are limited and are being addressed through the recruitment of more specialized staff. Even without this optimization however we still contemplate approx. a 4 month time lag between the agreement of the partners on the implementation of an intervention and *water flowing*. Alternative, more rapid implementation solutions will be investigated.

4. Cross-cutting Issues

4.1 Result Measurement

TIRTA has successfully integrated into the AIP-Rural Result Measurement (MRM) System and Management Information System (MIS). The new integrated system assures coherence between TIRTA and all the other projects under AIP-Rural and facilitate knowledge and resource sharing. The new reporting line of TIRTA’s MRM to the AIP-Rural Head of MRM proved effective in providing QA and ensuring consistency of across the measurement systems and reporting.

TIRTA conducted its first impact assessment using CAPI reducing survey costs and length while improving accuracy. The MRM Coordinator liaised with MIS staff to develop the CAPI questionnaire and supervised the data collection in the field performed by TIRTA’s assistants. Compared to the paper-based baseline conducted in the same area, the time required from design to data analysis using CAPI decreased by 40%: CAPI doubled the number of respondents interviewed by each enumerator per day (from 3 to 6) and thus halved the time for data collection, eliminated data entry and significantly reduced data checks thanks to the live reference check feature. The elimination of data entry and the costs for

paper, decreased the overall costs by around 30%. No extra costs were incurred for the tablets as TIRTA borrowed the devices owned by SAFIRA. As PRISMA and SAFIRA will be moving into CAPI, TIRTA is developing a short report with lessons learnt and suggestions.

The DCED training improved the team capacity and is expected to reduce the burden on MRM resources and improve adaptive intervention management. TIRTA's implementation staff have required significant support for the articulation of interventions logic and result chains and the development and updating of the ISDs which has been entirely performed by the MRM. The DCED training was key in supporting the hand-over of the ISDs to the SBCs and instil ownership, and will improve the quality and relevancy of baselines and impact assessments by allowing the implementation team to provide critical inputs. In order to further develop the capacity of the SBCs, BCs and assistants a shorter training will be conducted in February. As TIRTA's assistants and BCs should lead the monitoring activities with relatively small supervision, and additional sessions on monitoring will be carried out during the next activity in February to pilot the use of improved monitoring tools recently developed.

The AIP Rural's Head of RML has also has initiated the coordination with TIRTA's MRM Coordinator to develop a plan for the next DCED audit in 2018 for all AIP-Rural programs. The plan includes the scheduling of a mock audit for SAFIRA, TIRTA, and ARISA as well as self-assessment of these programs around 6 months prior to the mock audit. In due course, the AIP Rural's Head of RML will invite both TIRTA's and ARISA's RM focal point to participate in the planning of the DCED audit. Meanwhile the MRM training in February and follow-up mentoring will serve as a foundation for self-assessment and preparation for the mock audit.

4.2 Gender and Social Inclusion

TIRTA conducted a gender assessment to understand gender influences in the irrigation market, and finalised a working draft of its Gender Inclusion Strategy aligned to PRISMA's gender strategy and guidelines. The assessment conducted by a local gender specialist between August and September identified the main constraints and opportunities for gender inclusion in the irrigation sector providing context and strategic directions for the development of TIRTA gender inclusion strategy. TIRTA proposes a staged approach to gender inclusion - **From "Do No Harm"**: i.e. recognising when an intervention's expected outcomes and impact may have a negative effect on women, and establish processes to closely monitor the adverse effects in order to minimise the risk and act upon it should they start to manifest; **To "Gender Aware"**: disaggregate results statements and indicators by sex, articulate an approach to Women Economic Empowerment that fits with TIRTA's capacity and overall targets and assesses when interventions are gender inclusive and require amendments, to ensure women and men can access the intervention, change their practices and benefit from such change.

In spite of this gender considerations are yet to be formalised and integrated across all TIRTA interventions although the team successfully improved the inclusiveness of the past Syngenta's trainings and will improve them further in the next semester. The lack of location-specific gender diagnostics to determine women's involvement in rice farming led to the wrong assumption that women are never involved in crop protection; hence although Syngenta's activities were not gender inclusive the team did not request any changes. Yet, when the monitoring missions during the trainings highlighted that in some locations women are involved in crop protection too, TIRTA supported Syngenta to ensure greater inclusiveness. As a result, the following trainings were made *women friendly* - the invitation process has been revised and lead farmers were encouraged to directly invite women; the training format and timing changed from formal, in the evening at the village hall, to *experiential*, in the field or casual gathering place, earlier in the day. In addition, Syngenta selected a women farmer to establish one of the demoplots in Leran.

TIRTA will benefit from external support to strengthen the team capacity and increase TIRTA's potential to catalyse WEE. Although the team participated in a one-day gender workshop conducted by the short-term consultant during the gender assessment, the overall capacity is still low. To compensate such limitations, Linda Jones' contract was amended to extend her assistance to TIRTA – she will visit the team in April to review existing and new interventions, further build the team capacity to mainstream gender across the intervention life cycle and help the identification and design of women

targeted interventions if deemed feasible. In addition, she will conduct a gender impact assessment in Pilanggede, and support TIRTA MRM by reviewing the baseline and impact assessment instruments currently used by the team.

4.3 Environment

The Environmental Impact Assessment led by Haskoning faced significant delays. A contract on the implementation of an “Environmental Impact Assessment” EIA was finalised on December 8th 2016. The EIA covers the impact of the TIRTA interventions on the environment in the three districts concerned by the project. Because of the recent decentralization, the local administration sometimes lacks the experience in handling the process and it is expected to take months for Haskoning (and TIRTA) to implement the study implying time consuming public hearings. As the pace is largely beyond the control of TIRTA, the end of process is estimated to be by July the 15th in Bojonegoro, and to take another 6 months to cover Tuban and Lamongan. As the present contract with Haskoning is ending on July the 31st a new contract will have to be issued prolonging the process till the end of 2017.

CSIRO’s support was instrumental in identifying feasible and effective solutions to the implications of irrigation on the river flow of the Bengawan Solo river where all the irrigation pumps are located. TIRTA proceeded with the allocation of the contract to RoyalHaskoningDHV, who accepted to incorporate the assessment of river flow, subject to contract amendment.

Meanwhile interim process/safeguards are being put in place while waiting for the finalisation of the framework. TIRTA needs to ensure that the implementation of environmental risks management occurs at all stages of the interventions and are being documented. TIRTA has appointed since early December an environmental expert to ensure that the implementation of environmental risks management occurs at all stages of the interventions and documented. The expert will advise on the preparation of the activity plan and start screening the sites where TIRTA starts implementing interventions. He has already developed recommendations and will provide more assessments on the sites where interventions have already started (Pilanggede, Malo and Piyak).

Contacts are being laid and quickly intensified with the district environmental offices, starting with Bojonegoro where most of TIRTA’s activities are implemented at this stage.

4.4 Communication

TIRTA’s Communications Strategy has been aligned with the wider AIP-R Strategy. This ensures that key messages are communicated to DFAT and key stakeholders in a consistent manner and that external events are effectively managed for AIP-Rural as a whole. TIRTA developed a work-plan that’s been revised and approved by AIP Rural’s acting Communications Manager the communication plan can be found in Annex 4. **TIRTA started developing key relationship and trust building with key audiences.** A first socialisation workshop was successfully conducted with relevant irrigation stakeholders in Bojonegoro. Participants included Bupati Bojonegoro, Dinas Pertanian and Dinas Pengairan (District Agriculture Office and District Irrigation Office) existing and potential investors, HIPPA representatives and farmers. The aim was to introduce TIRTA’s offer, provide a platform for key actors to share their plans and perception and stimulate dialogue. Similar workshops will be held in Lamongan and Tuban in the coming term and follow-up meetings with separate groups will be conducted in Bojonegoro. Workshops with private investors have recently started and will continue in the next months aiming to increase the awareness of the critical actors and stakeholder about the presence and quality of the support services promoted by TIRTA. These events should lead to more informed decisions and add confidence and commitment to invest.

TIRTA assigned one business consultant to lead the production of printed and other marketing material to ensure the programme engages with key audiences in a cohesive and consistent manner. As a result a brochure has been developed that summarises TIRTA’s offer and includes key messages addressed to main stakeholders – it will be adapted to the interest of the target groups and distributed as introduction / reminder of events/ meetings with the latter. Additional PR materials, such as a portable booth for events and an office signage for the provincial office in Bojonegoro are almost finalised and will be available in the next months.

4.5 Risk Management

In view of the integration of the programs TIRTA has been developing a matrix adopting risks common with the other AIP programmes and kept separate the more specific risks linked to the results of TIRTA's program. TIRTA is introducing a few new Fiduciary elements; the "Risk of Fraud" and "Underspending" (which is high as TIRTA is changing gear and has to increase investments in the very near future)..

TIRTA will monitor environmental risks more closely in particular the impact of La Niña and resulting floods that could damage pump equipment and irrigation infrastructures. On a similar note TIRTA will place much emphasis on the EIA – the team will arrange regular assessment with the EIA managing contractor over the whole assessment and strengthen the team with an environmental expert that will support TIRTA's operation on a regular basis. In parallel to the EIA TIRTA will develop and improve its internal processes and an additional internal assessment and risk management tools for use during intervention design.

Child protection has been added this semester as a potential risk to TIRTA activities, if protection measures are not in place to safeguard child welfare. Existing measures to already mitigate this risk are the Palladium Child Protection Guidelines already in place and all staff receive training on these guidelines, and risk assessments have been undertaken since late 2016 and will continue in to 2017.

Two risks have been de-escalated; at the Results level the staff capacity in the team has been brought to a level that they have technical skills to make interventions successful and that the private sector partners develop buy-in commitment for interventions. A detailed analysis can be found in the Risk Matrix (Annex 3).

5. Stakeholder Relationship Management

5.1 GOI & Sub-National Agencies

TIRTA was encouraged to focus on its portfolio and accelerate the delivery of its planned interventions. In this context the promotion and interaction with the GOI and subnational agencies were temporarily kept to the minimum. Relationship however remained open and collaborative.

TIRTA engaged with district level bodies in a workshop with the Bupati of Bojonegoro, the District Agriculture Office and District Irrigation Office. Informal but relatively frequent interactions with the Dinas at specific sites such as Malo and Piyak ensure that TIRTA's offer and activities are understood and a good relationship is maintained with the relevant ministerial line department.

A recent meeting was held with representatives of the Dinas Pertanian (Local Office of the Ministry of Agriculture) and Dinas Pengairan (Local Office of the Ministry of Public works/ Irrigation Division) to exchange plans and information in a first attempt to synchronize the respective activities. The meetings were positive. Follow-up meetings are expected to reveal the location, size and importance of the new irrigation expansion but also the magnitude of the maintenance and repair of the existing systems. The Dinas Pengairan and Pertanian are also expected to give inputs on the particular administrative and financial problems for which structural private sector alternatives might be sought (i.e. energy, working capital).

In the next semester TIRTA will seek to improve interactions with relevant government bodies at the district level. Two workshops will be conducted in Lamongan and Tuban following the same format and objectives of the first workshop in Bojonegoro. Follow-up meetings will be held in the next months to improve the collaboration with the Dinas.

5.2 Private sector partners

TIRTA is currently engaging with 6 investors with experience in irrigation (three of which are already partnering with TIRTA). TIRTA has scoped over 80 more investors – all seem to fit into three categories based on their *size*:

- Very large investors; don't need external support and prefer to act on their own. They might be lured in trying something new, as long as TIRTA lowers the risks by co-investing;
- Medium size investors; A more attractive group appears to be the investor between 100- 300 ha, ideally with some education, skills and knowledgeable of the irrigation business. He/she has his own funds or the ability to access through loans from banks or other sources. He/she might be more willing to irrigate areas where HIPPA are currently failing, however prefer to acquire irrigation rights from HIPPA and Village Leaders.
- Very small investors: less than 50 ha, in general have limited means to invest, can't resist financial shocks, are in general very local and are not interested in upscaling and replication.

New contacts were made with potential implementers of assessment of pump and irrigation systems and the related SOP. Contacts were made with reputable companies in the water pump sector. Torishima, Grundfos and RoyalHaskoningDHV.

Torishima is a large Japanese corporation that also performs pump and system-audits, the way it was done by Stuart Higgins for TIRTA in three sites around Bojonegoro. They have the relevant technical personnel available and expressed interest in developing the service although it would not be profitable as a stand-alone service. They considered the possibility under a different company format as a niche market. TIRTA plans the audit of several Torishima audits in the near future and expects similar results as with Stuart's audit i.e. identification of quick wins that make water flow and more structural recommendations that need major refurbishing work.

Grundfos is a large Scandinavian company promoting solar panel driven pumps. Although this methodology looks expensive and likely not feasible for rice it might be a solution for non-rice crops in areas where energy is difficult to source. Grundfos appears to have a good aftersales service and eager to prove the value of its concept. They also have a strong team with assessment capacity. They will also be invited to perform audits in areas that fit their particularities.

Syngenta is Swiss world leader in pesticide production. The company is already an active TIRTA partner in different interventions. TIRTA is now planning to develop a combined pesticide and crop improvement exercise and see whether the combination leads to increased crop production. If successful, TIRTA expects Syngenta to adapt and replicate the process.

Hextar is a Malay Indonesian company set up by an offspring of Syngenta. Hextar sees an opportunity to work with AIP-Rural on fertiliser for rice farmers in East Java They want any collaboration that will grow their fertiliser market and are happy to work in East Java because it is where their new factory is and because they have a strong distribution network here.

5.3 Other AIP-Rural programmes

The revised governance arrangements facilitated and increased the interactions between TIRTA and the rest of AIP-Rural.

SAFIRA is conducting a rice sector analysis in TIRTA's target area (Bojonegoro, Tuban and Lamongan) and is exploring innovative finance models for TIRTA's irrigation schemes; specifically models that could bundle smaller, individual tertiary irrigation investments together into one deal that would be more favourable for a traditional finance institutions or attract a regional equity impact investor.

ARISA (CSIRO) provided critical support and quality assurance for the EIA and interactions is expected to continue in the future.

TIRTA benefitted from PRISMA's Operations and MRM support and collaborated with PRISMA's Gender Specialist to refine the gender strategy and introduce WEE indicators in the first Impact

Assessment as well as refine the MRM system. Synergies may be sought after the rice sector assessment that will be developed by PROMARK.

6. Operation

6.1 Operations

Following their visit in September 2016, the MTR team made a recommendation that operations for PRISMA/SAFIRA and TIRTA be combined to improve the efficiency and coordination of service delivery. The transition to an AIP-Rural 'One Operations' team began in late October 2016 and operations staff for all three Palladium-managed programs now report to the Head of Operations and Finance, who will oversight all operations systems and processes. The new integrated team held a retreat to better facilitate the transition and improve communication and cooperation between the units. TIRTA operations in Bojonegoro were reviewed and some changes made to ensure alignment with existing PRISMA processes.

6.2 Personnel Management

A number of TIRTA key personnel were replaced and additional support was provided by Palladium staff. A new Team Leader began in September. His long experience in M4P and deep knowledge of the Indonesian context steered TIRTA in the right direction, providing strategic guidance, re-focus, and critical linkages with the private sector. Palladium also seconded a Young Professional to TIRTA from August 2016 who proved instrumental in achieving the semester targets and provided strong MRM and gender oversight. Mindful of the M4P weaknesses, TIRTA searched for new recruits preferably with experience in M4P or with a strong business acumen – TIRTA replaced two Intervention Coordinators with two Senior Business Consultants (SBC) – one with M4P experience and the other with strong project related private sector experience from the oil and gas industry. The Bojonegoro-based team was restructured and refreshed during last quarter of 2016 - another business consultant was recruited to reinforce the research and knowledge development of TIRTA and local assistants coordinators hired to support activities on the ground. Two additional Business Consultants are considered in view of the increasing workload. Collaboration with PRISMA is sought for the selection and recruitment process.

To ensure that the technical side of the TIRTA programme is also covered, TIRTA is actively looking for a pump-lift engineer to be hired on a retainer basis. He will check the technical feasibility of the irrigation interventions (as necessary) and support implementation when required. TIRTA already hired an agronomist on this basis.

The capacity of the current team has been improved and will be further strengthened. All recruits went through an induction phase and attended a combination of trainings – 3 staff attended a DCED training in January, 2 the project management training and 3 the deal making one, and 1 BC received a one day internal training on communications. TIRTA will ensure that the whole team gets more exposure to the different aspects of M4P through exchanges with PRISMA. A short training on M4P is planned for end of February together with a three-day result management session conducted by the Project Director and a DCED consultant. One SBC is expected to join the next Springfield M4P training. The recently recruited business consultants will be put through brief mentoring sessions with the PRISMA team; the Senior Consultant without development experience will receive repeated and more varied exposure sessions.

Following MTR recommendations, the governance structure of AIP-Rural was revised. Operations, Communications and Results Measurement now support all Palladium-managed programs under AIP-Rural (see Section 2) and AIP-Rural is headed by a General Manager and a Deputy General Manager (DGM). Under the new AIP-Rural structure, TIRTA operations and results measurement staff were re-aligned to report to the Head of Operations and Finance and Head of Results Measurement respectively.

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6.3 IT & MIS

Revisions to the TIRTA MIS coding structure began in the second semester of 2016 in an effort to migrate to a single database and financial system with PRISMA. TIRTA MIS migration is anticipated to be complete in March 2017 and will simplify approvals and reporting.

Annex 1: Summaries of Intervention Plans

Below the summary of existing interventions and new interventions where irrigation is expected to be operational before the end of Y17S1.

Pilanggede – existing intervention

Issue at the core	Cause	Root cause	Intervention Area	TIRTA's Intervention Idea
Limited irrigation supply	Sub-optimal returns and high risks from irrigation provision	Low crop productivity	Productivity Enhancement	Crop protection with Syngenta
		High incidence of pest outbreak	Irrigation Expansion	Irrigation TA

Haji Achsin is a local entrepreneur and small irrigation provider (he owns a rice mill and a warehouse). He's been serving 50Ha of rice fields in Sarirejo since 1992. Over two decades later he's been asked to expand his service and irrigate Pilanggede (~240 Ha) but he agreed to irrigate only 60Ha in Kaligede hamlet due to the low average productivity (~6MT/Ha) in the area and the high incidence of pest outbreaks.

Challenges and constraints

The low average productivity and high incidence of pest outbreaks is caused by:

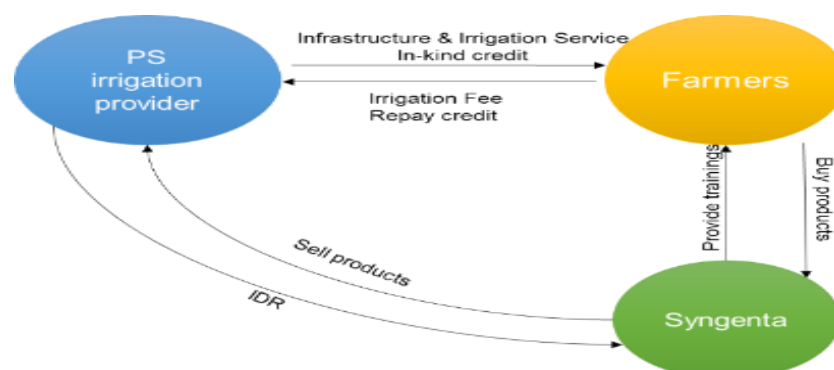
- **Farmers' limited knowledge of crop protection** which leads to inappropriate pesticide selection and dosage
- **Limited extension** services to weak public provision and lack of private alternatives#
- **High price of pesticides**

Vision of change

Improved knowledge of crop protection, as a result of embedded provision of GAPs by input suppliers, and provision of in-kind credit, increases the volume and quality of rice production, lowering the risks borne by the irrigation providers and increasing his returns thus allowing for further expansion and increased sustainability.

TIRTA approach

To achieve this vision TIRTA has: partnered with Syngenta and the investor Haji Achsin and established an integrated business model: Syngenta establish two demoplots, conduct trainings on crop protection using the Gromore technology and dedicate additional resources as necessary; Haji Achsin, further supports adoption through in-kind credit (Syngenta pesticides).



Progress to date

The demoplots, trainings, and Syngenta's presence in Pilanggede convinced Haji Achsin to proceed with a first expansion (100 Ha) and later on a further 60/70 Ha expansion. He also provided in-kind credit. In view of the investor's commitment and the potential replication of the model in another location TIRTA decided to co-invest in the construction of the canal (together with Achsin and the village administration). Phase 2 will be operational for the current rainy season.

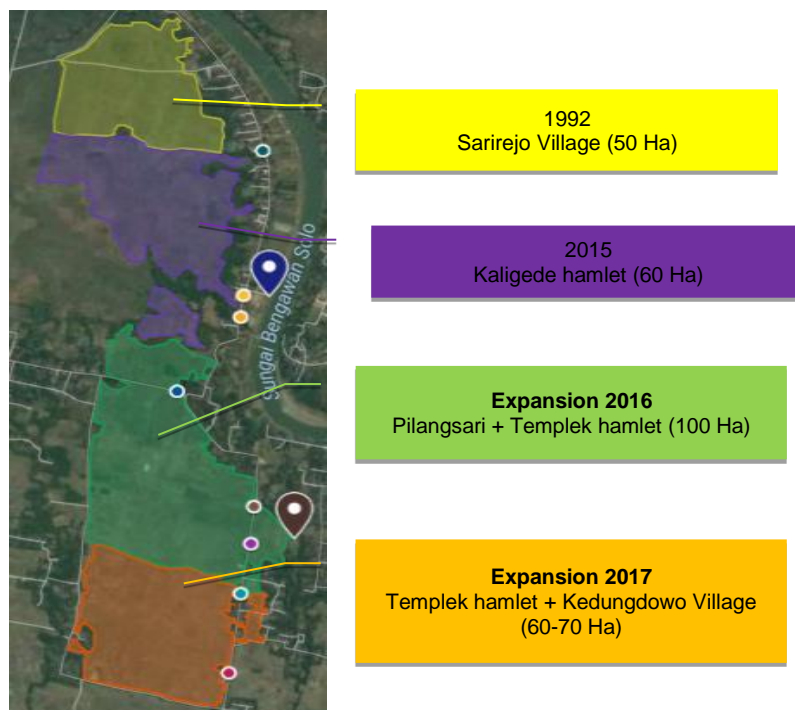


Figure 3 Irrigation expansion in Pilanggede

Summary of key indicators (December 2016)

KPI	Description	Actual
KPI1	Number of farm HH who increase their income due to AIP RURAL Interventions	304
KPI1a	Number of farm households under \$2.5 PPP poverty line with increased net-incomes	222
KPI2	Net Additional attributable income for targeted All farm HH	2,500,330,300
KPI2a	Net attributable additional incomes of farm households under \$2.5 PPP poverty line	1,825,241,119
KPI3	Number of Intermediary Service Provider (ISP) with increased turnover	1
KPI4	Value of additional turnover of Intermediary Service Providers (ISPs)	520,000,000
KPI5	Number of Intervention	1**
KPI6	Number of initiative taken by government to improve Business Enabling Environment (BEE)	0
KPI7	Number of intervention partners (private sector and public sector)	3
KPI8	Value of investment by private sector partners (IDR)	1,371,785,000

**KPI4 only considers the turnover increase from irrigation provision – however, the increase in production also increased the turnover of his rice milling business which is expected to increase even further after Phase 2 is operational and he will be able to source paddy in the rainy season when most of Bojonegoro is flooded.

Leran 2 – existing intervention

Issue at the core	Cause	Root cause	Intervention Area	TIRTA's Intervention Idea
Limited irrigation supply	Poor irrigation design and state of infrastructure	Limited irrigation technical capacity	Irrigation Expansion	<p>Irrigation system assessment – Technical and economic feasibility study</p> <p><i>Quick-fixes</i> to improve the infrastructure and the system performance</p>

A JICA funded programme provided a pump station to Leran village and a HIPPA was established to manage the scheme. In 2015 the HIPPA submitted a proposal to the Dinas Pertanian to replace the Japanese pump which was no longer working – the government provided a pump in 2016. However, once the HIPPA received the pump they did not have sufficient working capital to operate the pump station and asked Mr Kusnadi (a local entrepreneur) to manage the scheme.

Constraints and challenges

Leran 2 presents constraints at two levels:

- Site establishment through government subsidies
 - **poor technical knowledge** resulted in **poor infrastructure design and related hydraulic inefficiencies**, and the **lack of training on O&M** and overall **irrigation management** led to **sub-optimal irrigation** (and low returns) and **deterioration the infrastructures**.
- The takeover from Kusnadi
 - Where **poor technical knowledge** impedes the required technical improvements and ultimately irrigation provision

Vision of change

Irrigation providers increase their technical knowledge and therefore can improve the quality of their service and increase their return, while farmer can access high quality irrigation, increase their productivity and incomes.

TIRTA approach

To achieve this vision TIRTA has:

- Assessed the irrigation infrastructures provided by the government and the overall design in order to gauge the maximum potential of the existing pumps and system;
- Developed a technical and economic feasibility study;
- Shared the main recommendations with the investor and system operator;
- Established an irrigation demosite and developed technical materials to promote good practises in irrigation design and infrastructure O&M.

Progress to date

The pump assessment identified pump location and suction-pipe size as the most significant factors that currently reduce pump's efficiency by around 53%. The study also suggests that several modifications, such as the use of a booster pump should be made to achieve the maximum capacity of

the pump. A *quick fix* to the suction pipe was suggested by the consultant - the pump operator followed the suggestion soon after the meeting with TIRTA team in early September (primer pipe).

The primer pipe doubled the pump capacity which immediately allowed the water flow to effectively irrigate the 17 Ha south of the rain where farmers were using a combination of lift and groundwater irrigation due to frequent pump failures and intermittent water provision, and a further 13 Ha expansion.

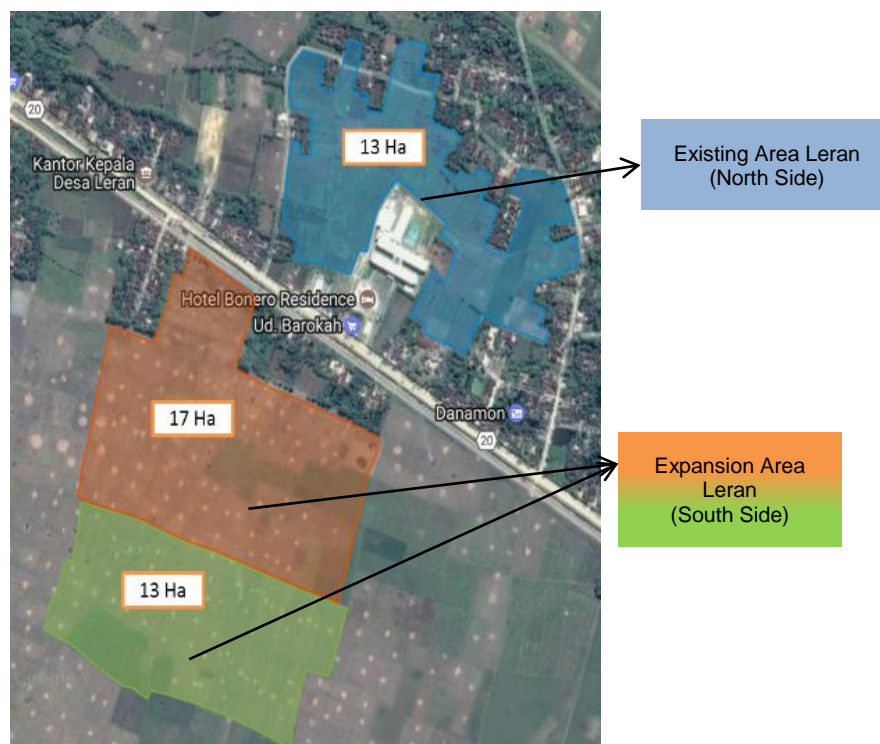


Figure 4 Irrigation expansion Leran 2

Summary of key indicators (December 2016)

KPI	Description	Actual
KPI1	Number of farm HH who increase their income due to AIP RURAL Interventions	50
KPI1a	Number of farm households under \$2.5 PPP poverty line with increased net-incomes	35
KPI2	Net Additional attributable income for targeted All farm HH	308,142,223
KPI2a	Net attributable additional incomes of farm households under \$2.5 PPP poverty line	215,699,556
KPI3	Number of Intermediary Service Provider (ISP) with increased turnover	1
KPI4	Value of additional turnover of Intermediary Service Providers (ISPs)	150,000,000
KPI5	Number of Intervention	1
KPI6	Number of initiative taken by government to improve Business Enabling Environment (BEE)	0
KPI7	Number of intervention partners (private sector and public sector)	1
KPI8	Value of investment by private sector partners (IDR)	192,825,000

Malo – New intervention

Issue at the core	Cause	Root cause	Intervention Area	TIRTA's Intervention Idea
Limited irrigation supply	Poor irrigation design and state of infrastructure	Limited irrigation technical capacity	Irrigation Expansion	Irrigation system assessment – Technical and economic feasibility study
	Sub-optimal returns from irrigation	Low average productivity and risk of pest outbreaks	Management Capacity	Design and infrastructure improvement
			Productivity Enhancement	G-HIPPA Management capacity building
				GAP training

The intervention covers 7 villages in Malo (2,195 potential farmers) with a distinct hilly terrain – a topography which makes irrigation **technically complex**. As such challenges have not been overcome by local actors, farmers in Malo are currently only able to cultivate one crop of rain fed paddy a year. Furthermore, due to several pest outbreaks the **crop productivity is low**, increasing the risk of investing in irrigation provision, and thus adding to the constraints the local actors are facing. In 2015 the **government has provided a pump station to the G-HIPPA** in Malo, which is claimed to have the **potential to serve 600 Ha** across the 7 villages, yet the existing irrigated land is only 65Ha.

Constraints and challenges

- **Poor technical knowledge** resulted in **poor infrastructure design and related hydraulic inefficiencies**
- **Lack of training on O&M** and overall **irrigation management** led to **sub-optimal irrigation** (poor-quality, low returns and no savings/reserves) and **deterioration the infrastructures**
- **Limited access to working capital** as HIPPA's are not legal entity and therefore cannot access loans from banks

Vision of change

Irrigation providers increase their technical knowledge and management capacity and therefore can improve the quality of their service, expand and increase their return, while farmer can access high quality irrigation and GAP, hence increase their productivity and incomes.

TIRTA approach

To achieve this vision TIRTA:

Provided irrigation Technical Assistance

- Assessed the irrigation infrastructures provided by the government and the overall design in order to gauge the maximum potential of the existing pumps and system;
- Developed a technical and economic feasibility study;
- Shared the main recommendations with the Dinas Pertanian and G-HIPPA Malo;
- Co-invest (proof of concept for best practice in irrigation design)
- Will establish an irrigation demosite and develop technical materials to promote good practises in irrigation design and infrastructure O&M – once the system is operational

Partnered with Syngenta to promote productivity enhancement

- Syngenta has established demosites and conducted trainings on crop protection;
- TIRTA has conducted an agronomic assessment;
- TIRTA is piloting complementary GAP trainings covering water management and organic soil matter management (with Syngenta) – ongoing

Improve management capacity

- Conducted a light touch capacity need assessment
- Is currently scoping sustainable options for management capacity
- Planned peer learning with established HIPPAAs (March/April)
- Is supporting the development of a budget for expansion Phase 1 and 2 and oversee financial management
- Will deliver training (Y17 S1)

Progress to date

Irrigation expansion

The irrigation expansion has been partially adapted to TIRTA's recommendations, and the reimaging will be implemented once the Dinas Pertanian will hand over the system to G-HIPPA Malo. The expansion is depicted below:

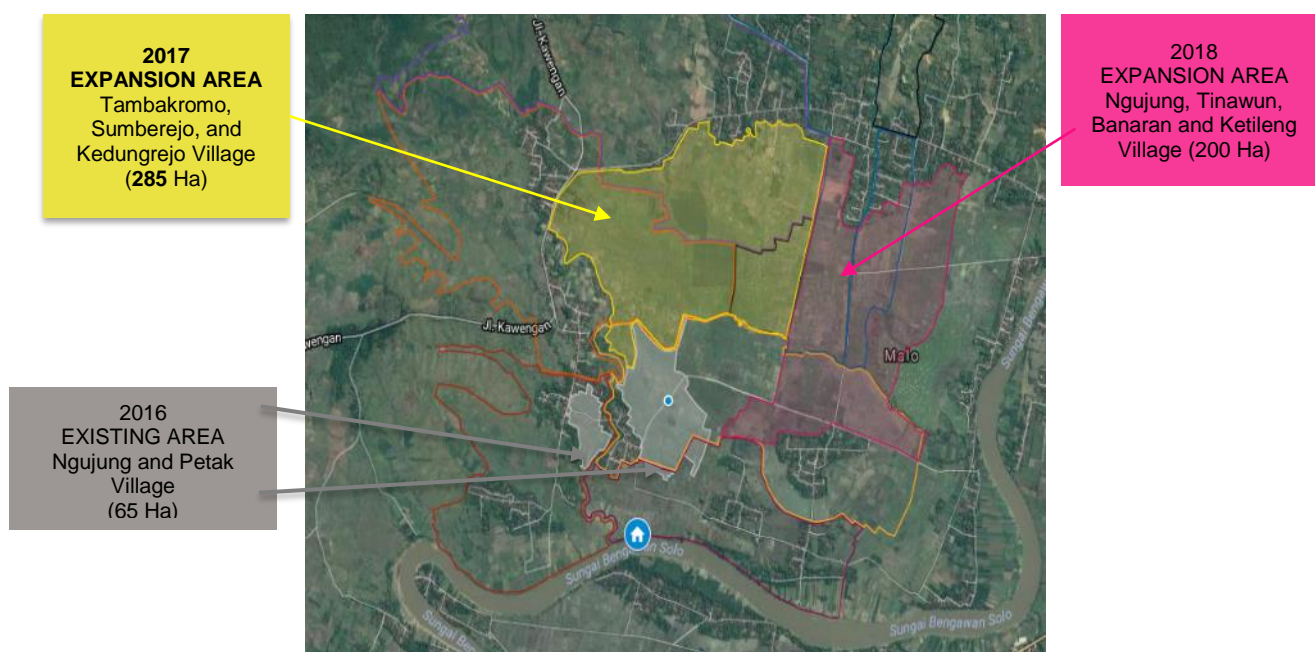


Figure 5 Irrigation expansion in Malo

Productivity Enhancement

120 Farmers trained in crop protection using Gromore (Syngenta) pesticides. The demoplots were very successful (9.6MT/Ha) and the farmers requested more training to cover the expansion area in the comings season. TIRTA is currently piloting a complementary demoplot/training on water and organic matter management that Syngenta may adopt in the future.

Projected key indicators

553 Ha expansion by 2018 with **1,529 farm HH** projected beneficiaries

Kemiri – New intervention

Issue at the core	Cause	Root cause	Intervention Area	TIRTA's Intervention Idea
Limited irrigation supply	Complex topography	Limited irrigation technical capacity	Irrigation Expansion	Irrigation system assessment – Technical and economic feasibility study
	Sub-optimal returns from irrigation	Low average productivity and risk of pest outbreaks	Productivity Enhancement	Irrigation in complex topography – proof of concept GAP training

Kacangan, Sidomukti, Besah and Sekaran, four villages in Kemiri currently have no access to irrigation. The significant height and distance from the river increases the cost and technical complexity of irrigation in the area – a constraint that is yet to be resolved by the local actors. Finding an irrigation methodology and design that is both profitable for the irrigation provider and effective for the farmers to grow paddy, would lead to a total of 400 Ha of irrigated land, serving 1035 potential farmers.

Constraints and challenges

- **Complex topography** hinders expansion due to **limited technical knowledge**

Vision of change

Irrigation providers increase their technical knowledge and can supply irrigation profitably and effectively to land which is located far from the river and at high elevation, while farmer can access high quality irrigation and GAP, hence increase their productivity and incomes.

TIRTA approach

To achieve this vision TIRTA:

Provide irrigation Technical Assistance

- Assess alternative irrigation system designs;
- Develop a technical and economic feasibility study and investment plan together with the investor
- Co-invest to de-risk the investment from the partner



Figure 6 Irrigation expansion Piyak

Partner with the investor to promote productivity enhancement

- Pilot GAP trainings covering plating, water management and organic soil matter management

Piyak – New intervention

Issue at the core	Cause	Root cause	Intervention Area	TIRTA's Intervention Idea
Limited irrigation supply	High risk and limited sustainability of irrigation provision from G-HIPPA	Low average productivity	Investment facilitation	Attract private sector investment and facilitate agreement
			Management capacity	
			Irrigation Expansion	Peer learning and capacity building training
	Limited capacity for expansion		Productivity Enhancement	Irrigation TA
				GAP training

The intervention covers five villages, Sedeng, Bakung, Sumber Wangi, Bungur and Simorejo, which established a G-HIPPA in August in light of the planned irrigation expansion, partially funded by the National and District government, that should provide access to irrigation across the five villages. The extension is planned to take place in two phases: Phase 1: Where water from the river will get to a water tank; the District Government directly builds the pump station and pays for and installs the main pipes and water tank (the infrastructure has been completed at the end of October); Phase 2: Additional main pipe to be installed from Sedeng to Bakung (to increase the water in the furrows). The G-Hippa received the payment from National Gov in the last week of October and the G-Hippa is preparing for the construction of the main pipe. This fund will only cover the material, where the labour etc. will have to be covered by the G-HIPPA. (30/11/2016 completed).

Constraints and challenges

- The G-HIPPA received the main infrastructures from the government but **lacks working capital to operate the system**;
- **Lack of training on O&M** and overall **irrigation management poses a high risk of failure, sub-optimal irrigation** (poor-quality, low returns and no savings/reserves) and **deterioration the infrastructures**.

Vision of change

Local investor(s) supply working capital and supervise operations for a share of the output, while farmer can access high quality irrigation and GAP, hence increase their productivity and incomes.

TIRTA approach

Co-investment facilitation

- TIRTA is approaching a number of investors that are interested in partnering with G-HIPPA Piyak (and if the model is successful replicate in the future) by supplying working capital and technical oversight
- *If necessary TIRTA will facilitate TA to audit the system and the planned expansion

Improve management capacity

- Conducted a light touch capacity need assessment
- Is currently scoping sustainable options for management capacity
- Planned peer learning with established HIPPA's (March/April)
- Is supporting the development of a budget for expansion Phase 1 and 2 and oversee financial management
- Will deliver training (Y17 S1)

The combination of working capital and movement capacity building is expected to lead to the profitable and effective irrigation of 551 Ha by December 2018 – the first operation expansion is expected to cover 200 Ha between Sedeng and Baking before the first dry season 2017.

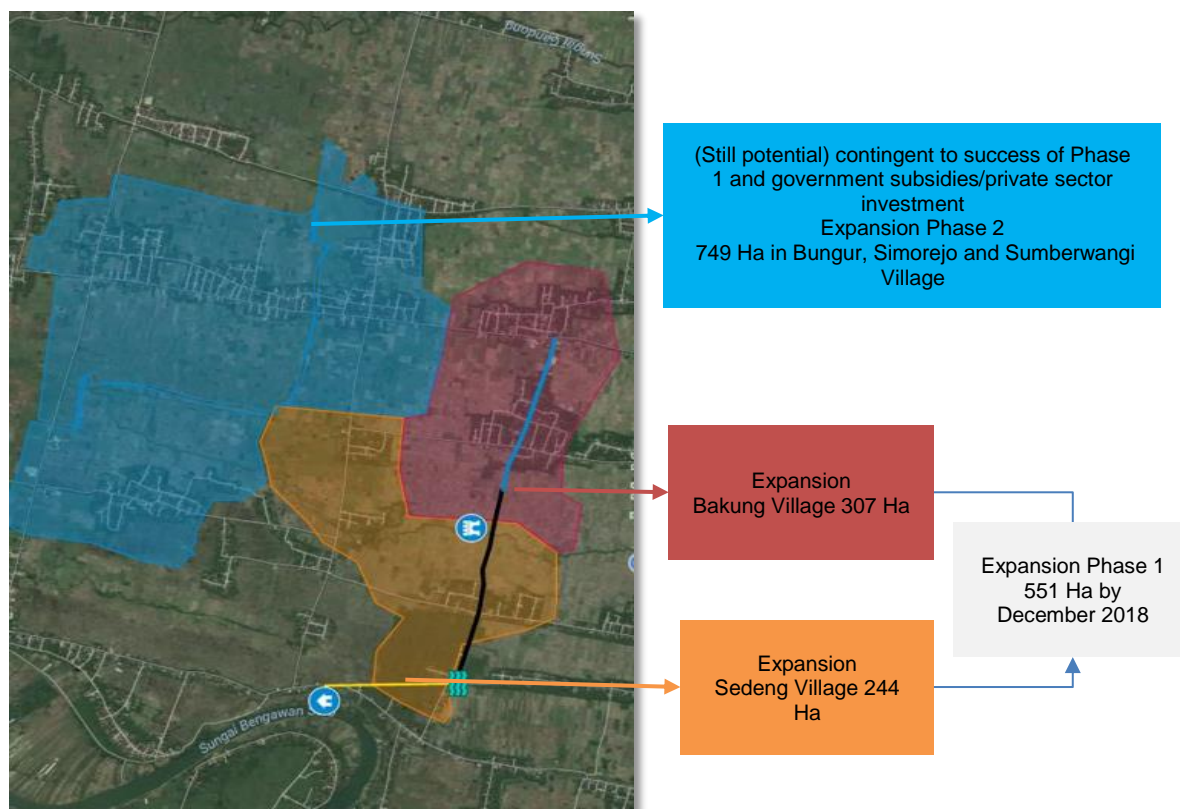


Figure 7 Irrigation expansion in Piyak

Productivity Enhancement

- Pilot GAP trainings covering plating, water management and organic soil matter management (expected to start before the beginning of 1st dry season 2017)

Annex 2: TIRTA Communication Plan

Target Audience	Key Message / Key Issue	Media	PIC (lead, support)	Remark	Action Plan 2017
Internal (GOA/GOI) & External audience (general)	How M4P works; sharing information on progress and lessons learned	1. Website 2. Stories on M4P approach 3. Promotional materials: - TIRTA backdrop for events - TIRTA additional standing banner - TIRTA portable booth	Comms Manager, Comm Liaison officer TIRTA		1. WEBSITE - Comm Liaison officer to be training as Web Administrator Q1 & 2 - New intervention data to be entered when MOU signed 2. Approved stories on M4P, update when needed 3. Promotional materials: - Banners/back drops designed using vendor (Q1) - 1 additional standing banner printed (Q1) - Backdrops printed for events, printed when needed - 1 portable booth designed and procured (Q1)
Internal (GOA/GOI) & External audience (general)	What is TIRTA and what do we do?	1. Information kit containing: - TIRTA Profile (in the form of brochures) - Area map showing intervention sites 2. Promotional materials - TIRTA backdrop - TIRTA standing banners - TIRTA booth 3. Stories from the field	Comms Manager, Comm Liaison officer TIRTA	Some document already exist. TIRTA Profile will be updated following format of AIP-Rural program profile Info kit folders provided by AIP-Rural Comm Unit	1. Information kit: - TIRTA Profile to be updated (S1) - in the form of brochures - 500 copies brochures printed - Intervention map in the brochures (also in the website for S1, update when needed) 2. Promotional materials to be produced (S1) 3. Approved story on how TIRTA works (with updates) to be translated into Indonesia (S1)
DFAT and GOI Counterpart	Proof of concept - there are effective models that work and can be adopted in other locations	1. Stories from the field (beneficiary success stories) 2. Video	Comm Liaison Officer TIRTA, Comm Manager, Comm Coordinator	Comm Manager will coordinate the video	1. One Story from the field from perspective of PSP or one story from perspective of beneficiaries (one per semester) 2. Video to show success in field and proof of concept (3 minutes) (S2)
PSP and GOI stakeholders in Lamongan and tuban district	Introduce TIRTA, who we are, what we do and what we can offer	Socialisation workshop	Comm Liaison Officer TIRTA, Comm Manager, Comm Coordinator		Develop PPT presentation (S1) 1 socialisation workshop held in Tuban 1 socialisation workshop held in Lamongan Video on TIRTA profile/introduction
Internal	Promote TIRTA as part of AIP-Rural	Standard corporate branding tools: - PPT/ report templates - Stationery - logo/ branding	Comms Manager, Comm Liaison officer TIRTA	These have been prepared for TIRTA	Update Communication Protocol to include TIRTA (S1)

Annex 3: TIRTA Portfolio Planner Tool - Snapshot

No	Intervention	Manager	Assistant	Status	Weeks 28 Nov - 9 Dec			Weeks 10 Dec - 7 Jan			Week 9 -15 Jan	
					Current Status	Who	Next Steps	Current Status	Who	Next Steps	Current Status	Next Steps
1	Pilanggede	William	Lulus	On time	A severe flood has hit Pilanggede, including the farmers in the in-kind credit area. The construction of the canal has yet to start. Achsin contacted William - he is worried about the impact of the flood.	Dipo/Lulus	Lulus to go to Pilanggede to understand the impact of the flood (who is been affected) Finalise IA - plan WEE Budhi to update on tender	Evaluation of flood losses made by MRM Construction of canal started - as per 4 Jan 17 is 30% progress	William - Dipo (and IC assistant s)	Follow -up construction of canal	30% of the canal has been completed - good quality so far 1st payment disbursed to the contractor Impact assessment completed	Analysis of the IA data Continue to monitor the progress of the canal (expected completion date mid Feb)
2	Leran 2	William	Jemi	On time	Dani and Aris met Kusnadi last week, he is not interested to expand more in the area because the potential is only 25 HA - but we use it as a proof of concept we have a report from Stuart	Dipo - Giulia	Monitoring to assess the expansion (Dipo to lead) - from farmers list we might want to amend the report from Stuart so that it covers only the pump improvement and related expansion by 13 Ha)	1. Yulius could not meet with pak Kusnadi 2. Expansion actually took place; more farmers had access to irrigation 3. report from Stuart should be amended	Yulius Dani - Dipo	pak Yulius to amend report (maybe reschedule visit?) / Describe "Demonstration Site with small but effective fixes" Confirmation on increase from Kusnadi's expansion area, as a result from the "quick fix" on the priming pipe. Interview Kusnadi about the business calculation of the last season MK2 - compare the with and without scenarios.	assessment completed - installed pump capacity doubled	enterprise survey with Kusnadi determine status of Leran 2 (intervention completed? Or expansion 25Ha?)
3	Malo	William	Mahbub	On time	Investigating doc signed in May where all the Hipa reps state that they have failed to properly run the scheme and they need support from TIRTA to do so. They were expecting a formal agreement IP almost completed revise business calculation and projections G Drafted MoU	G, A , D	Giulia, Dipo and Aris to develop ISD on Wed Finalise MoU and IP	1. IC and IP complete 2. MOU established and signed - requesting management assistance from TIRTA 3. PA stipulating the contribution of TIRTA and the HIPPA to implement the recommendations of Stuart 4. Agreement of using Malo as "demonstration site" (?)	William	Agreement of using Malo as "demonstration site" Develop a template on exposure training against fee? (for Malo, Tinto, and 3rd demo site, Kaligerman) - for end of next week	Construction Phase 2 by the Gov still ongoing Procurement for Phase 1 ongoing Syngenta visited Malo with Agronomist and identified pest	Demo recovery to reduce risk from pest (Syngenta to provide details on when they are delivering the training) Too late for demoplots (start in April) - Arief to develop training with Syngenta on water management Waiting for Pak Budhi to purchase material for Phase 1 expansion

