

TIRTA PROJECT

GHIPPA/HIPPA ASSESSMENT



Draft of Report

LIST OF ABBREVIATIONS/ACRONYMS

<i>AD/ART</i>	<i>Anggaran Dasar/Anggaran Rumah Tangga</i> (Articles of Association)
HIPPA/ GHIPPA	<i>Himpunan Petani Pemakai Air/ Gabungan petani Pemakai Air</i> (Water Users Associations)
TIRTA	Tertiary Irrigation Technical Assistance
TOR	Term of Reference

TABLE OF CONTENTS

List of Abbreviations -----	ii
Table of Contents -----	iii
Executive Summary -----	iv
I. Introduction -----	1
1.1. Background -----	1
1.2. Roles and Responsibilities -----	1
1.3. Expected Output and Deliverables -----	2
II. Methodology -----	3
2.1. Conceptual Framework -----	5
2.2. Data, Source of Data, and Analysis -----	6
III. Findings and Analysis of Assessment -----	6
3.1. General Context -----	7
3.2. Lessons learned from HIPPA Tirto Tinoto and Subur Makmur -----	7
3.2.1. Governance Resources Management -----	8
3.2.2. Strategy -----	12
3.2.3. Structure -----	12
3.2.4. Finance, Rewards & Incentives -----	13
3.2.5. Helpful Mechanism, especially in irrigation water distribution -----	15
3.2.6. Internal Relations -----	16
3.2.7. Leadership -----	17
3.3. . Map of Internal Capacities of GHIPPA Sumber Barokah (Piyak) and GHIPPA Berkah Tirta Mandiri (Malo) -----	17
3.2.1. Resources Management -----	18
3.2.2. Strategy -----	19
3.2.3. Structure -----	19
3.2.4. Rewards & Incentives -----	20
3.2.5. Helpful Mechanism -----	21
3.2.6. Internal Relations -----	21
3.2.7. Leadership -----	21
IV. Recommendation -----	23
Reference -----	28

List of Table

Table 1. Establishing Process-----	8
Table 2. Governance and Resources Management -----	10
Table 3. Irrigation service fee -----	15
Table 5. Profit allocation -----	15

List of Annex

Annex 1. HIPPA Tirto Tinoto Organization Structure -----	29
Annex 2. HIPPA Subur Makmur Organization Structure-----	30
Annex 3. Curriculum for Comparative study -----	31
Annex 4. Curriculum for Business Plan Training (2 days training) -----	32

Executive Summary

Objectives of assessment

Consultant has responsibilities to conduct a management' needs assessment in selected HIPPA's and G-HIPPA's in the area of Bojonegoro, Tuban and Lamongan and to provide the recommendation to develop GHIPPA, this included to organizational structure and functional structure, provide design and develop training programs aimed at strengthening the HIPPA's, members of the G-HIPPA; capabilities to meet the minimum statutory and operational requirements as under. Consultant has conducted assessment in Bojonegoro and Tuban of 2 GHIPPA's and 2 HIPPA's. By using the Institutional Assessment and Capacity Development that develop by EU, consultant has collect two main data sources, which are secondary and primary data. Secondary data collected all documents related to GHIPPA/HIPPA and TIRTA report. Meanwhile, primary data were obtained from interviews with selected respondents.

Findings and Analysis of Assessment

Food supply is largely determined by the availability of irrigation water. World Bank study showed that the contribution of irrigation to increase in rice production in Indonesia during period 1972 to 1981 approximately 16.5%. Together with other factors of production such as good seeds, fertilizer, and good agricultural practices, contribution of irrigation simultaneously could be reach 75%. In some villages in Tuban and Bojonegoro districts, most of farmers cultivate the rice only once a year. This is due to the limited water resources. Efforts to develop a technical irrigation has been done by the government, but coverage is very limited and the current channel distribution is not too good. To anticipate that, in the areas of the territory adjacent to Bengawan Solo (Solo River) such as villages in Tuban and Bojonegoro, appears irrigation pumps managed by the communities and private sectors. Community groups formed HIPPA. Some of these HIPPA groups have successfully developed services of the tertiary irrigation system and it give the impact to increase farmers' income. Early identification of the successfully of these HIPPA's is strong leadership, consistency, involvement of members in decision-making processes, the support of the village government, and they have a profitable business.

This report will be focused on capacity assessment of GHIPPA Piyak and GHIPPA Malo with benchmarking to Tirta Tinto in Karang Tinoto and Sumber Makmur in Klotok, Tuban District. Both GHIPPA was formed in 2016. For GHIPPA Piyak (Sumber Barokah) is composed by HIPPA from 5 villages in the Kanor sub-district. Construction of new irrigation channels pass through two villages with an estimated range of services as much as 268 ha of which is planned of 1068 ha for 5 villages. Meanwhile, GHIPPA Malo (Berkah Tirta Mandiri) consists of HIPPA from 8 villages in the Malo sub-district. Same as to GHIPPA Piyak, currently irrigation channel only reach 122.75 ha of 722.5 ha planned.

Based on the experiences of HIPPA Subur Makmur and HIPPA Tirta Tinoto, originally establishment of both HIPPA is top down due to response JICA projects. And after 2 year project running the HIPPA services is stop because the pump engine damage and HIPPA not have cash. Nonetheless, after JICA project, both of HIPPA are growing due to several key factors. Strong leadership and visionary particularly during periods of growth, governance very nice especially regarding the rules of membership, HIPPA committee membership is clear and implemented and guided by rules, administrative systems were nice (rules, membership, planning and finance), financial management were immaculate (the budget plan, the rules of the cost of services and how to collect the services fee, rules of how profit sharing will be managed, including financial planning for the operational needs), they also have a mechanic and mechanism for the maintenance of the network, pumps, and also the distribution of water. Although both HIPPA has slight differences in institutional form, duration management, the amount of any fees and profit sharing.

The following analysis is to look beyond the internal capacity GHIPPA map consisting of aspects of resources management, strategy, structure, rewards and incentives, helpful mechanism, internal relationships, and leadership.

Resources Management. Establishment GHIPPA is top-down and implementation involves many parties, not only the member of board as there is in the minute of establishment, but also involved government officials from villages, sub-district, and district. Therefore, the possibility GHIPPA work will be strongly influenced by the various interest groups. So far, the rules of the organization in the form of minute of establishment that signed by GHIPPA member of from the villages involved and approved by the sub-district leader and Bojonegoro district leader. Member of board GHIPPA are people who work voluntarily to develop GHIPPA and the irrigation network project. Generally, their background are village office staffs and farmers. In addition, because establishment of GHIPPA was supported by government, either directly or indirectly, GHIPPA are also controlled by sub-district and district officers.

Experiences of GHIPPA is limited as the implementing partner of the government irrigation project for the construction of the second phase. GHIPPA not yet have a clear strategy and the resources that would execute GHIPA services, including the information associated with rewards, internal communications, supporting mechanisms, and leadership in GHIPPA.

Strategy. GHIPPA only has the minute of establishment of GHIPPA that signed by members (HIPPA) and approved by the Bupati. However, in general there is no other documents related to institutional strategic plan. Based on experience to Tirto Nitoto and Sumber Makmur, legality of HIPPA is not flexible. Tirto Tinoto has legally incorporated as an association and and legalized by a notary public. Member of HIPPA board is approved by by vilage leader. In other hand, Sumber Makmur not legalized by a notary public, but only by village leader and district leader. Until now, if refer to Inpres No. 3 tahun 1999 no clear rules on legal entities of HIPPA.

Both of GHIPPAs not yet develop a plan and operational activities to achieve the vision and mission GHIPPA. Has not explained the general strategy of this GHIPPA resulted GHIPPA yet have a funding strategy to run the organization especially to fund their operating costs.

Structure. The organizational structure of GHIPPA is adopting a similar organizational structure of the existing HIPPA in the other villages (albeit at a modest form). If comparing GHIPPA with similar organizations elsewhere, it appears that the existing organizational structure of GHIPPA tend to imitate the other HIPPA organization in other villages. The difference GHIPPA organization involves many villages and, known by the sub-district leader and approved by the Bupati. Member of Board as a main organ that implementing of day to day activities and have not seen the role of other organs of GHIPPA (Advisory Council and Board of Trustees). GHIPPA has personnel of 10 people who plays as a board member. But that contribute to organizational work until now is no more than five people and centered on the Board Chairman, secretary and treasurer and member come from village has been irrigated by irrigation network. While other organs have not been formed

Rewards & Incentives. Rewards and Incentives that received by the member of board is still low. Both in Piyak and Malo, member of board is only got incentive from government project because the irrigation network is managed by GHIPPA and they got fee from it. Although in GHIPPA Malo already run services since 2015 but so far there is no profit gained. In 2015, GHIPPA assets of managed by third party and farmer faced crop failures and cannot share the yield, third pary left the debt to the board of HIPPA. Since 20016, board of HIPPA was running and still not gain a profit due they have to cover debt in 2015. Nevertheless, the board saw that there is potential for considerable profit if GHIPPA can be managed properly. Especially if you see and compare with GHIPPA already run in the other villages. Potential of GHIPPA also has seen by the member of board.

Helpful Mechanism. There is no helpful mechanism to support GHIPPA. As a new organization who were aged 6 months it is not surprising that GHIPPA has many internal challenges associated with common understanding among member in terms of planning, implementing, and monitoring and evaluation. Unfortunately, the support mechanisms to solve this problem has not yet clear. Despite taking care to see that there may be a problem if GHIPPA unable to cope with operating costs mainly to pay for electricity and maintenance of irrigation channels. GHIPPA not have a regular meeting schedule member of board of both HIPPA and GHIPPA to draw up a program of activities, monitoring, and evaluation.

Internal Relations. GHIPPA member of board is village office staffs and farmers' leaders. GHIPPA's strength has recorded during the assessment is good personal relationship among active member of board and common agreement among them that the increase in production and productivity of rice should be increased. Although member of board already knows each other, contribution of them to develop GHIPPA are not optimum. This is because there is no fulltime staff who focus work to GHIPPA and other reason is the irrigation network is not yet covering all villages under GHIPPA.

Leadership. Circle of influence of the board leader was limited to influence one of the project team and the government. So far the role GHIPPA driven by the board and under the leadership of chairman of the board. Regularly meeting of board member is not running well. Coordination and communication is only done to the staff of the project and government.

One of the most important factors of GHIPPA function well to provide irrigation service to farmer is sustainability, both of operational and financial sustainability. The success of the organization to support the funding need of the basic requirements such as the existence of the service is clear, measurable work programs, and the personnel to carry out the work plan of the organization. To achieve these roles, GHIPPA need to develop the strategic planning for the sustainability of GHIPPA. In addition to some of the findings as described in the previous section, there are some important aspects that should not be overlooked and be important notes.

- The lack of experience of board member in managing the organization GHIPPA.
- GHIPPA formed with many interested parties, especially from the government.
- GHIPPA already have sizeable assets. However, with the existing assets can also be problems related to the ownership status of assets and how to manage it. In addition, to run the service GHIPPA need a source of funding, especially for the operationalization of the early stages.

Recommendation

TIRTA support for GHIPPA Piyak and GHIPPA Malo may will support objective of TIRTA project in short time. These GHIPPAs have services area of 2000 ha and can be reach 5,000 farmers. Proven experiences from HIPPA Tirto Tinoto and Sumber Makmur that successful service of HIPPA could increasing of the farmer income more than 30%. Reflecting on the findings in the previous section, the following are recommendations that could be support by TIRTA to GHIPPA.

TIRTA could provide support to GHIPPA to develop strategic plan and restructuring of organizational chart. TIRTA could help to develop the annual work plan, and TIRTA could technical support to develop business plan and Financial management. So far GHIPPA not yet have a business plan. Some of activities that could be done by TIRTA to support GHIPPA such as.

- Conduct the comparative study to the best HIPPA in Bojonegoro or Tuban
- Support to develop organizational chart of GHIPAA. This included develop AD/ART of GHIPPA
- Support to develop business plan of GHIPPA
- Support to GHIPPA to get access to sources of funding (loan / investor) especially in first year operation of GHIPPA services
- Technical support for the identification of irrigation network maintenance and improvement
- Support develop monitoring and evaluation system of GHIPPA services

I. Introduction

1.1. Background

Tertiary Irrigation Technical Assistance (TIRTA) is one of the suite of programs of AIP-Rural working in eastern Indonesia. TIRTA's goal is to increase the net income of 10,000 poor farmers by 60% through the improvement of the efficiency and technical and economic viability of tertiary irrigation.

The magnitude of positive impacts of irrigation on farmers' income depends on the quality of the irrigation service delivered and overall irrigation management performance. However, the stakeholder mapping and more recent closer analysis show that weak management performance levels are common across the community-led irrigation schemes (HIPPAs or Water Users Associations) in TIRTA's targeted areas. There are two factors leading to poor service delivery and overall poor performance of the HIPPAs:

- **Lack of appropriate and effective institutional arrangements and or their effective implementation**, including clarity in rights and responsibilities, appropriate incentive structures and effective accountability mechanisms, and;
- Low cost recovery resulting from **low level of irrigation charge, inappropriate charging structures and poor collection rates**.

Under these conditions, funding for the sector is systematically low and maintenance of the systems is neglected; there is a lack of incentives for service providers and the users to improve on service delivery, and there are no incentives for users to improve water use efficiency. Indeed, weak irrigation management is one of the main constraints to sustainable tertiary irrigation, hence one of the areas TIRTA will seek to address.

1.2. Roles and Responsibilities

- a. Conduct a management' needs assessment in selected HIPPAs and G-HIPPAs in the area of Bojonegoro, Tuban and Lamongan (max 4)
- b. In consultation with key members of 1 federation of HIPPAs (G-HIPPA), based on the management needs assessment. Decide about the structure and organs of the G-HIPPA;
 - i. Statutory: Functions/Objectives of HIPPA, Obligations of a HIPPA, Procedure for setting-up a HIPPA, HIPPA Membership, HIPPA Members' Rights and Obligations, HIPPA Governance & Management Bodies, Powers of HIPPA's bodies, Voting Right in a HIPPA and others as deemed necessary by the G-HIPPA's representatives

- ii. Operational:
 - 1. Management of water users and collect irrigation fees (review current HIPPA's membership process, fee and collection rate; review of irrigation service fee, collection methods,
 - 2. Maintenance of the irrigation system, overall management and appropriateness to sustain O&M
 - 3. Running the pump stations and fair water distribution to members, management of the irrigation business in a profitable and sustainable way.
- c. Design and develop training programs aimed at strengthening the HIPPA's, members of the G-HIPPA; capabilities to meet the minimum statutory and operational requirements as under (a). The trainings will include but not limited to governance issues, their rights and obligations, statutes, financial management,
- d. Plan the implementation of the trainings in liaison with the key stakeholders

1.3. Expected Output and Deliverables

The outputs of this assignment will be as follows:

- 1. Assessment/Profiling of Selected HIPPA's (4)
- 2. Draft MoU on the design and training programs aimed at strengthening the HIPPA's, members of the G-HIPPA;
- 3. Final presentation and report on the assessment of the selected HIPPA's, the structure of the G-HIPPA and the elaboration of the Draft MoU

II. Methodology

2.1. Conceptual Framework

Refer to background in the TOR of this assignment, one task of consultant is assessing the GHIPPA/HIPPA and develop program to strengthening of GHIPPA/HIPPA. Consultant propose to use the Institutional Assessment and Capacity Development that develop by EU¹ for dealing with 1) institutional and capacity assessment; and 2) capacity development issues. This assessment framework is not only focus on inside of organization, but also it is necessary to focus on organizations in their contexts (figure 1).

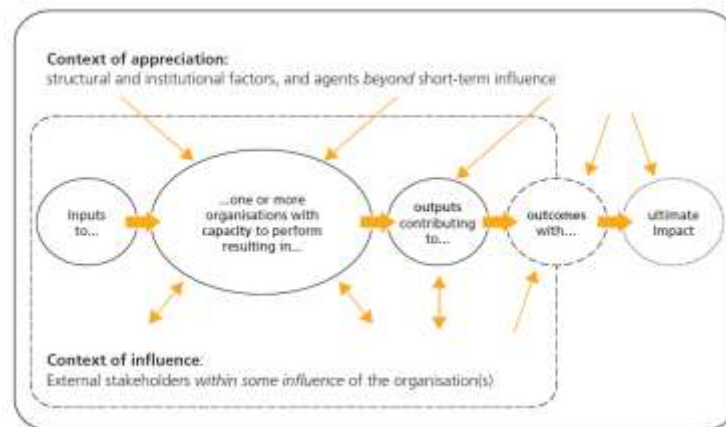


Figure 1. Analytical Framework

To conduct the institution assessment as framework above, consultants will follow steps as bellow:

Step 1: Identify the vantage point for assessment

This step will identify some issues that determine the set of organizations and actors. It will thus be necessary to assess the capacity of a *network of organizations*, which may also include civil society or private sector actors and their incentives to engage in any particular collaboration.

Step 2: Focus on the outputs

The outputs are the *direct products and services* of GHIPPA/HIPPA, and the immediate effect of organizational performance. Outputs contribute to *outcomes*, which again contribute to *ultimate impact*, or any further impact in the result-

¹ European Communities, 2007, Institutional Assessment and Capacity Development: Why, what and how?

chain perspective. The focus on capacity makes it is important to focus on the immediate effect of organizational performance: the products and services.

As a second step, therefore, it is useful to assess the quality and quantity of the *existing outputs* (products and service) of the various relevant organizational works and networks. Outputs are *good proxies* for capacity. Existing output's levels will also reflect an initial capacity which most often develops incrementally and gradually, not in great leaps.

Step 3: The context

Structural and institutional *context factors* outside the boundaries of the organization will influence it, as will the actions of other organizations and individuals.

Step 4: Inputs or resources

The inputs consist of funds, staff, technology, materials, services and knowledge from all sources including from development agencies. One of critical point in this step is analysis of the comprehensive overview of all funds (recurrent and capital) available to the organization with indication of the revenue sources is critical to get before any conclusions can be drawn.

Step 5: Looking inside organizations and networks

After looking at the outputs and the context and the inputs, it is of course important to go inside. Organizational capacity is shaped and conditioned by factors inside and outside organizational boundaries, but it resides in the organization or organizational network, and it needs to be broken down into elements as figure 2. All boxes are important, but two boxes are very important: leadership and rewards. In this part is important to assess the business model of GHPPA/HIPPA.



Figure 2. Organization's Elements will be assessed

2.2. Data, Source of Data, and Analysis

By using the conceptual approach and framework above, this used of two main data sources, which are secondary and primary data. Secondary data collected all documents related to GHIPPA/HIPPA and TIRTA report (list of documents in Annex 1). Meanwhile, primary data were obtained from interviews with selected respondents as in Annex 2.

Primary and secondary data were analyzed quantitatively to answer several key questions related to the context where GHIPPA and HIPPA exist. Further analysis was done to see institutional capacities related to strategy, leadership, organizational structure, reward, internal relations, and the supporting mechanisms to GHIPPA itself. At the end, consultant provide the recommendations to TIRTA about possibility to support GHIPPA

III. Findings and Analysis of Assessment

3.1. General Context

Food supply is largely determined by the availability of irrigation water. World Bank study (1982) showed that the contribution of irrigation to increase in rice production in Indonesia during period 1972 to 1981 approximately 16.5%. Together with other factors of production such as good seeds, fertilizer, and good agricultural practices, contribution of irrigation simultaneously could be reach 75%. Although in its development, the irrigation contribution is not able to grow. Apart from the cost factor of maintenance is not cheap, as well as the process of land conversion disturbing the existing irrigation network

Land and water resources are coming under competing pressure not only from agriculture but also from industry, growing urban and rural populations, and the impacts of climate variability. Water resources management and irrigation play a very important role in Indonesia's socio economic development in terms of food security. Irrigated agricultural land produces 85% of national rice production and 95% of Indonesian people consume rice as a staple. Irrigation also has a significant impact on farmer incomes. When compared with other inputs like fertilizers and seeds, the typical net income gain for water resources is up to three times greater. Focusing on tertiary irrigation can therefore allow many farmers to move from subsistence to small-scale commercial production.

In some villages in Tuban and Bojonegoro districts, most of farmers cultivate the rice only once a year. This is due to the limited water resources. Efforts to develop a technical irrigation has been done by the government, but coverage is very limited and the current channel distribution is not too good. To anticipate that, in the areas of the territory adjacent to Bengawan Solo (Solo River) such as villages in Tuban and Bojonegoro, appears irrigation pumps run by the communities and private sectors. Community groups formed HIPPA. In addition, some private sector (individuals or groups) to develop irrigation by pumping, either through groundwater or utilizing a channel of water taken from the major rivers like Bengawan Solo.

Some of these HIPPA groups have successfully developed services of the tertiary irrigation system and it give the impact to increase farmers' income. Besides the existence of HIPPA is also provide contribution to village development. Two of the successful HIPPA are Tirto Tinoto and Subur Makmur. Both are located in Tuban, East Java. Both of these groups are the best examples of how HIPPA are managed and developed. Both groups are already established more than 20 years. Impacts of HIPPA of these two groups is not only to farmers but also the community. In HIPPA Subur Makmur as an example, profit of the

HIPPA have been used to build the village amenities such as village office but also to provide socio-economic assistance. Early identification of the successfully of these HIPPA is strong leadership, consistency, involvement of members in decision-making processes, the support of the village government, and they have a profitable business.

In the next section of this report will be focused on capacity assessment of 4 GHIPPA and HIPPA, namely HIPPA Tirto Tinoto (Karang Tinoto Village, Rengkel Sub-District, Tuban District), HIPPA Subur Makmur (Klotok Village, Plumpang Sub-District, Tuban District), GHIPPA Piyak (Sumber Barokah) in Kanor sub-district, and GHIPPA Malo (Berkah Tirta Mandiri) in Malo sub-district, Bojonegoro District. Both of GHIPPAs has the same characteristics that the establishment of GHIPPA was done by the government's initiative to respond of central government irrigation programs in both sub-districts. What distinguishes the GHIPPA Malo and GHIPPA Piyak is that GHIPPA Malo already provide delivery services of irrigation in last year, while GHIPPA Piyak plans to provide services in the month of April 2017.

3.2. Lessons learned from HIPPA Tirto Tinoto and Subur Makmur

HIPPA Sumber Makmur and Tirto Tinoto formed in 1993. Initially establishing both of HIPPA were supported by JICA's project but this project did not sustained due of pump had broken. JICA supported build irrigation network and pump. However, Tim Leader of Sumber Makmur and Leader of Tirto Tinoto initiated to re-operating the asset of HIPPA by looking other source. Tirto Tinoto looked the investor from third party until this HIPPA has sufficient capital to provide the services and Sumber Makmur initiated to develop a member funds itself through getting the loan from HIPPA member to re-operate the HIPPA Subur Makmur until HIPPA has financially strong (Table 1). Both of HIPPA is only covering the services to farmers in one village where HIPPA established. Both of HIPPA have already manage the irrigation services by their self. HIPPA are servicing only to their villages. During the assessment involved of member of board is high and almost team agreed that strong leader is necessary especially to re-operate HIPPA services after collapsed. Activity of GIPPA is provide irrigation services. This included provide support on GAP. Benefit of HIPPA to farmer and community is high especially in Sumber Makmur. Sumber Makmur provide 50 % of profit to village development especially for public facility rehabilitation and construction. HIPPA also provide 2,5 of profit to charity especially for poorest people and orphan. In regard with legality aspect, HIPPA Tirto Tinoto and Sumber Makmur is different

Table 1. Establishing Process

	Tirto Tinoto	Sumber Makmur
Initial support	JICA Project but not sustained due of pump broken	JICA Project but not sustained
Re-operating support until has sufficient budget	Investor (third party) by profit sharing mechanism. HIPPA and investor got 50 % from provide. Until 2003, farmer provide 20 % of yield to HIPPA and investor	Collect loan from group member. HIPPA provide 50 % interest rate for 4 months. Member who got services provide 1/6 of yield to HIPPA until 2004.
Legality	Legally of HIPPA in 2003 after have AD/ART in 2003 and ratified by Notary Public as association (<i>perkumpulan</i>) in 2004.	establishment of HIPPA Sumber Makmur with Village Decree (Peraturan Desa) Klotok No. 01/1993 and strengthened by the District Leader Decree (Peraturan Bupati) of Tuban No. 07 / P / 1993.
Number of member and areas of services	when HIPPA operated in 1993 has 933 HH (320 ha of services areas) and now has 1033 HH (463 ha of services areas).	when HIPPA operated in 1993 has 933 HH (320 ha of services areas) and now has 1033 HH (463 ha of services areas).

The following analysis is to look beyond the internal capacity HIPPA's map consisting of aspects of resources management, strategy, structure, rewards and incentives, helpful mechanism, internal relationships, and leadership.

3.2.1. Governance and Resources Management

- Both of HIPAs have AD/ART as rule to manage HIPPA. the difference is that Tirto Tinoto AD/ART has ratified by a notary and Subur Makmur is ratified by village leader. AD/ART of both HIPPA provide guideline about membership, how to select be board of HIPPA, advisory board, supervisor, meeting of member, how fee of services will determined.

- Members of HIPPA is all the farmers who receive the irrigation services, both surface water and groundwater, which can be either farmers, tenant farmers or sharecroppers, representatives of government agencies who use the irrigation services, or companies that use irrigation services. Status of membership will be end if the farmer (land owner) death, change of ownership, change of sharecroppers, or HIPPA reduce the working area. Exceptions in Tirto Tinoto that every HH only has 1 membership event if HH member has sevices from HIPPA
- Member of HIPPA Board is selected from member by member. HIPPA Board is composed of chairman, secretary, treasurer, coordinator of the areas, and mechanics. In daily activities, HIPPA Committee Membership is supported by chairman of tertiary areas, chairman of the sub-tertiary areas, and chairman of the plot.
- The term of office of the HIPPA committee membership is two years in Sumber Makmur and 5 year in Tirto Tinoto and may be re-elected for a second period. After experiencing the 3rd replacement periods, the member of committee already served 2 periods can be reelected. Requirements to be board of HIPPA, he/she are Member of HIPPA, resides in the village Klotok/Karang. As additional HIPPA Sumber Makmur that age of board member of HIIPA is between 25 to 55 years old, at least graduated from elementary school, approved by of the head of the village.
- **Meetings.** Meeting of members is the highest decision of HIPPA. One member has one vote. Members may determine: 1. AD / ART, 2. public policy of organization in term of management and business, 3. Election and dismissal of the member of HIPPA 's board
Meeting of members consist of:
 - a. Meeting of members of the seasonal (2 times in 1 year in line with the implementation of the rice planting season),
 - b. Special members' meeting related to changes in the AD / ART or infringement of HIPPA's board member,
 - c. Meetings outstanding of members to respond incidental need
- **Dispute resolution.** Dispute in HIPPA can be done through mechanisms existing meeting like the one above.
- **Reporting**
Board of HIPPA will provide 2 reports. Report to member of HIPPA thought meeting of member and prove the report to village leade.. At least 2 documents have to be prepared by the board of HIPPA.
 - **Organizational report.** This is consisting of list of members, board of HIPPA, supervisors, AD/ADT (if there are changes), the report of activity

- **Financial and admiration report.** This is consisting of financial report (balance sheet / profit and loss, cash flow, cash, bank) and administration of member (member fee, report of the rice selling)

Table 2. Governance and Resources Management

	Tirto Tinoto	Sumber Makmur
HIPPA Membership	<ul style="list-style-type: none"> • Members of HIPPA is all the farmers who receive the irrigation services • Members of HIPPA is a whole farmer who get irrigation services with additional provisions if in one HH there are two or more persons get irrigation services, then membership is only counted one person. • Status of membership will be end if the farmer (land owner) death, change of ownership, change of sharecroppers, or HIPPA reduce the working area. 	<ul style="list-style-type: none"> • Members of HIPPA is all the farmers who receive the irrigation services, both surface water and groundwater, which can be either farmers, tenant farmers or sharecroppers, representatives of government agencies who use the irrigation services, or companies that use irrigation services. • Status of membership will be end if the farmer (land owner) death, change of ownership, change of sharecroppers, or HIPPA reduce the working area.
HIPPA Board member	<ul style="list-style-type: none"> • Selected from member by member • The term of office of the HIPPA committee membership is five years and may be re- 	<ul style="list-style-type: none"> • Selected from member by member • The term of office of the HIPPA committee membership is two years and may be re-elected for a second period

	<p>elected for a second period</p> <ul style="list-style-type: none"> • Composition of HIPPA board has to represent sub-villages • HIPPA board member is consists of • Requirements to be board of HIPPA, he/she are: <ol style="list-style-type: none"> 1. Member of HIPPA, 2. resides in the village Noto Tinoto 	<ul style="list-style-type: none"> • Requirements to be board of HIPPA, he/she are: <ol style="list-style-type: none"> 1. Member of HIPPA, 2. resides in the village Klotok, 3. Aged 25-55 years, 4. At least graduated from elementary school, 5. Approved by of the head of the village. 6. Exceptions for mechanic, he/she must have a driver's license A
Advisory Council and Board of Trustees	<ul style="list-style-type: none"> • Board of Trustees are selected by head of village as a representative of the village office to supervise the board of HIPPA. Member of supervisors is consisting 2 persons that represent BPD and LPMD. • Advisory Council are Irrigation Commission and field extension staff 	<ul style="list-style-type: none"> • Board of Trustees are selected by head of village as a representative of the village office to supervise the board of HIPPA. Member of supervisors is consisting four persons that represent of each sub-village. Requirement to be a member of the supervisor is live in Klotok village, aged 25-55 years, at least graduated from elementary school, and approved by head of village. • Advisory Council are Village leader, PIT Sub-district, and PIT district, officer irrigation division of District Public Work Office, Officer of Dictrect Agruculture Agency

<ul style="list-style-type: none"> • Communication (internal and external) 	Internal communication through the mechanism of a meeting of members. While external communication represented by the board in this case is the chairman or a representative
<ul style="list-style-type: none"> • Meetings 	<p>Meeting of members. Meeting of members is the highest decision of HIPPA. One member has one vote. Members may determine: 1. AD / ART, 2. public policy of organization in term of management and business, 3. Election and dismissal of the member of HIPPA 's board</p> <p>Meeting of members consist of:</p> <ol style="list-style-type: none"> a. Meeting of members of the seasonal (2 times in 1 year in line with the implementation of the rice planting season), b. Special members' meeting related to changes in the AD / ART or infringement of HIPPA's board member, c. Meetings outstanding of members to respond incidental need

3.2.2. Strategy

1. Both HIPPA own institutional strategy set out in the AD / ART. AD / ART can be changed according to the needs of members. Changes of AD / ART must be approved by members through meeting of members.
2. HIPPA strategy is then made in the form of program & work plans (5 years program in Tirto Tinoto and 2 years program in Subur Makmur corresponds to the period HIPPA board), annual work plans and the planting season work plan
3. HIPPA strategy is This strategy must have the approval of the members and approved by the head of the village

3.2.3. Structure

1. **Organizational structure of both HIPPA is similar, both in the form of role and function of each component of organization.** As additional, in Tirto TINOTO there is a special section dealing with agriculture especially to improve productivity from non-irrigation aspect such as GAP. Second, requirements to be member of each division in both of HIPPA is different as described in the previous section.

2. Member of Board as an organ that implementing of day to day activities, as bellow

• Task of HIPPA board member

Chairman and assisted by other member of board has the responsibility to:

- Make a plan and carry out the work program agreed by the members
- implement the plan and regulate the distribution of water
- To coordinate with head of village and government

Secretary

- Inventory of assets of HIPPA
- Record the membership of HIPPA and produce membership card
- Work together with the treasurer to record the administration fees and expenses
- Work together with mechanic to note the cropping pattern and put them together in the form of maps and develop schedules for water management
- Prepare reports as material of coordination with the village leader and staffs

Treasury

- Develop a budget plan
- Record the all receipts and expenditures with all evidences
- Work together with the secretary to prepare a report as a material of coordination with the village leader and staffs

Coordinator of Areas

- Organize and manage the use of the irrigation system
- Make a plan, supervise and maintenance of the irrigation network and water pump
- Coordinate the activities of farmers to work together for maintenance and repair the irrigation network.
- Work together with secretary to prepare a report as material of coordination to the village leader and staffs

2. Both of HIPPA have other organs to support GHIPPA (Advisory Council and Board of Trustees) as explained in previous section

3.2.4. Finance, Rewards & Incentives

1. Both of HIPPA has develop budget estimation for bi-annual Budget.

Budgets are prepared for every period of planting season. In every year there are at least 2 times for budgeting. Budget proposal is delivered and approved by member in the meeting of members before the planting season. Routine budget of HIPPA is consist of operational cost (fuel, electricity), maintenance, administration cost, insurance, and services. HIPPA Board will use HIPPA cash money to cover the all cost

2. Board of HIPPA will determine the needs of cost for every single session in pre-session, this included the cost for maintenance (if any).
3. **Both of HIPP determination of irrigation service fee** by member in meeting of members. So far, that service fee is determined by sharing of rice yields and will pay in every single harvest time. Tirto Tinoto and Sumber Makmur has different rule of profit share as bellow:

Table 3. Irrigation service fee

	Tirto Tinoto	Sumber Makmur
Irrigation service fee	<ul style="list-style-type: none"> • Dry season: 1/6 (16.6 %) of yield • Rainy season: 1/7 (14,2 %) of yield. 	<ul style="list-style-type: none"> • Dry season: 14 % of yields • Rainy season: 12 % of yields.
	As additional income, HIPPA could to collect fund from member if HIPPA need additional budget. Approval of additional budget is in meeting of members. .	

4. **Collection of Irrigation Fee** Board of HIPPA will collect service fee based on sharing of yield as agreement in every harvesting period. Board of HIPPA will sell all collected rice by auction mechanism
5. **Budget allocation, reward and incentives.** In every harvesting time, both of HIPPA will calculation the profit and make profit allocation base rule as bellow.

Table 4. Profit allocation

	Tirto Tinoto	Sumber Makmur
Profit allocation	<ul style="list-style-type: none"> • Services fee will collect in every single season (harvesting time). • Allocation of service fee will divide to : 	<ul style="list-style-type: none"> • All collected service fee in every single season (harvesting time) will reduced by operational cost. • Net income will be allocated to:

	<ul style="list-style-type: none"> ○ 15% for board member and village leader ○ 44-49 % for Operational cost ○ 2 % for village officers (BPD member, village officer, head of RT, head of RW) ○ 5 % to maintenance of irrigation network ○ 1 % HIPPA officer ○ 2,5 % Zakat (poorest people and orphans) ○ 15-20 % saving ○ 10 % Village development program 	<ul style="list-style-type: none"> ○ 20 % to the member of HIPPA board (8 % main member of board and 12 % working group) ○ 10 % to cover the administration cost (meeting, fee supervisors) ○ 12,5 % for saving of HIPPA ○ 2,5 % to zakat (Islamic charity for poorest people and orphans) ○ 50 % to village development program (building or infrastructure) ○ 5 % for saving of village government
	<p>As additional income, HIPPA could to collect fund from member if HIPPA need additional budget. Approval of additional budget is in meeting of members. .</p>	

3.2.5. Helpful Mechanism, especially in irrigation water distribution

1. **Organizational structure of both of HIPPA been very well with detail division task of each component, this included the helpful mechanism.**
2. **GHIPPA have a regular meeting schedule member of board of both HIPPA and GHIPPA to draw up a program of activities, monitoring, and evaluation.** Meeting of members is the highest decision of HIPPA as already explained in precious section.
3. **Helpful mechanism is very well.** This is included for distribution of irrigation water and maintaine of irrigation network and pump
 - **Operation Plan of water distributon** Board of HIPPA will apply of water distribution based on agreement during meeting of member in pre-session of planting. Water distribution will lead by area coordinators.

- **Water distribution.** Area coordinator will organize of open or close the gate in secondary network and chairman of tertiary will organize open or close the gates in tertiary network. Open or close the gate in every single areas is based on agreement.
- However, if farmer not receive sufficient water, he/she can request to chairman of tertiary areas and chairman will adjust water distribution based on field situation.
- **Operation of drainage system.** Areas coordinator will distribute irrigation water. He will supported by chairman of tertiary areas, chairman of sub-tertiary areas, mechanic, operators based on agreement of the meeting of HIPPA. Member prior planting season.
- **Routine inspection and Maintenance** Board of HIPPA will conduct routine inspection in 3 steps before planting season:
 - Check the condition of irrigation network and water storage, by mechanism as bellow:
 - Working group (will lead by chairman of tertiary areas, chairman of the sub-tertiary areas) and member (farmers) will check the condition building and irrigation network and whether functioning properly prior planting season.
 - Minor damage will handle by working group
 - If working group found medium or major damage, chairmen will report to area coordinator to be follow up.
 - Mechanic will check and repair the pump.
 - Plan of maintenance. Board of HIPPA will invite chairman of tertiary are and sub-tertiary areas, mechanic, and operators to discuss about plan and execute maintenance of irrigation network and pump. All cost of maintenance will covered by HIPPA.
 - Implantation of maintenance. Cleaning and repairing of irrigation network will handled by working group in pre-planting season. (25 working days)
- **Emergency Maintenance.** In case, if pump or electrify is can not be handled by mechanic, board of HIPPA sill send service provider.

3.2.6. Internal Relations

Meeting of members is the highest decision of HIPPA and already runnung well as explanation in previous section.

3.2.7. Leadership

1. **Both HIPPA has a strong leader.** While it looks that leader at Subur Makmur is more visionary than in Tirto Tinoto. The change of leadership in both of

HIPPA is already well underway through the mechanism prescribed in the AD / ART

2. **Circle of influence of the leader was very good, not only in internal board member but also to HIPPA member, community and government.**
3. Leadership seen very strong at the moment when the HIPPA need a budget for operational activities in 1st phase when HIPPA will re-operate after JICA project was unsustain

3.3. Map of Internal Capacities of GHIPPA Sumber Barokah (Piyak) and GHIPPA Berkah Tirta Mandiri (Malo)

Both GHIPPA was formed in 2016. The government is the initial initiator to form these GHIPPA through the Village Irrigation Rehabilitation Project (JIDES) / (JITUT). The program aims to restore / improve the irrigation function and services and to expand of services to more areas. So far, the activities that have been implemented is the establishment GHIPPA and provide assistance in establishing the irrigation networks. These GHIPPA is association of HIPPA of several villages located in one sub-district that planned to be irrigated by the irrigation project. For GHIPPA Piyak (Sumber Barokah) is composed by HIPPA's from 5 villages in the Kanor sub-district. The irrigation project has been running in 2 years, and second year, irrigation project is implemented by GHIPPA through the self-management approaches that government provide budget to be managed by GHIPPA. Construction of new irrigation channels pass through two villages with an estimated range of services as much as 268 ha of which is planned of 1068 ha for 5 villages. Meanwhile, GHIPPA Malo (Berkah Tirta Mandiri) consists of HIPPA's from 8 villages in the Malo sub-district. Same as to GHIPPA Piyak, currently irrigation channel only reach 122.75 ha of 722.5 ha planned.

With this situation, as the de-facto, areas has served by irrigation still limited to the villages through which the irrigation channel. Under these conditions, GHIPPA's member involvement has not been widely caused the benefits of irrigation channels is limited to villages has been passed by the irrigation channel. So far, activity of GHIPPA's management and member was limited to the construction of irrigation channels mainly from villages that have been passed by the irrigation channel.

The following analysis is to look beyond the internal capacity GHIPPA map consisting of aspects of resources management, strategy, structure, rewards and incentives, helpful mechanism, internal relationships, and leadership.

3.3.1. Governance and Resources Management

- Establishment GHIPPA is top-down and implementation involves many parties, not only the member of board as there is in the minute of

establishment, but also involved government officials from villages, sub-district, and district. Therefore, the possibility GHIPPA work will be strongly influenced by the various interest groups.

- The rules of the organization in the form of minute of establishment that signed by GHIPPA member of from the villages involved and approved by the sub-district leader and Bojonegoro district leader. In the minutes (which is shaped like adopting the AD / ART) has been prepared rules and duties of each board member of GHIPPA
- So far, the member of board GHIPPA are people who work voluntarily to develop GHIPPA and the irrigation network project. Generally, their background are village office staffs and farmers. In addition, because establishment of GHIPPA was supported by government, either directly or indirectly, GHIPPA are also controlled by sub-district and district officers.
- So far, the experience of GHIPPA is limited as the implementing partner of the government irrigation project for the construction of the second phase. For GHIPPA Piyak, they do not have the experience to do the irrigation services from existing channels. It is estimated, GHIPPA will provide the services in April 2017.
- GHIPPA not yet have a clear strategy and the resources that would execute GHIPPA services, including the information associated with rewards, internal communications, supporting mechanisms, and leadership in GHIPPA.

3.3.2. Strategy

GHIPPA only has the minute of establishment of GHIPPA that signed by members (HIPPA) and approved by the Bupati. However, in general there is no other documents related to institutional strategic plan. The Minutes of establishment of the GHIPA signed on August 26, 2016. So far, this minute is as a direction to GHIPPA activities. In the minute is provide information about mission, role, task, and income source of GHIPPA. The contents of the minutes is like AD / ART but not really as AD / ART because in the last part of the minute mentioned the obligation of the Board to make AD / ART of GHIPPA. So far, GHIPPA not yet develop a plan and operational activities to achieve the vision and mission GHIPPA.

Has not explained the general strategy of this GHIPPA resulted GHIPPA yet have a funding strategy to run the organization especially to fund their operating costs. So far the government assistance is quite large, especially in terms providing the irrigation asset but not yet clear the source of funding to cover operational cost especially to run the services/business. Estimated, the minimum cost required to cover the electrical fee is IDR 8 million / month if the electricity off. If the electricity will be used to irrigate during the planting, estimated the needs of budget is IDR 250-350 million per period. This only to cover electricity cost and not included the costs for operations and maintenance of irrigation network.

3.3.3. Structure

1. **The organizational structure of GHIPPA is adopting a similar organizational structure of the existing HIPPA in the other villages (albeit at a modest form).** If comparing GHIPPA with similar organizations elsewhere, it appears that the existing organizational structure of GHIPPA tend to imitate the other HIPPA organization in other villages. The difference GHIPPA organization involves many villages and, known by the sub-district leader and approved by the Bupati. With this form of organization that exists today, the fundamental change of the organization can only be done through meeting of member.
2. **Member of Board as an organ that implementing of day to day activities.** Refer to minute of establishment GHIPPA, daily activities are managed by GHIPPA board member, that is, people who have been selected through a meeting of members. However, if follow the GHIPPA formation process, they are sitting as member of board was formed by the government. Members and administrators that there was not purely based on professionalism but also selected based on political dimension. So far, the activities of daily GHIPPA organization directly managed by the Board. Board itself is not a fulltime staff but working as volunteers on the sidelines of their main job, especially as village office staff and farmers. The main board member is working both as village office staffs and farmers.
3. **Have not seen the role of other organs of GHIPPA (Advisory Council and Board of Trustees).** GHIPPA has personnel of 10 people who plays as a board member. But that contribute to organizational work until now is no more than five people and centered on the Board Chairman, secretary and treasurer and member come from village has been irrigated by irrigation network. While other organs have not been formed

3.3.4. Finance, Rewards & Incentives

1. **Both GHIPPA yet have an annual budget plan.** Although GHIPPA Molo already 2 times provide irrigation services, but so far the budget plan has not been prepared properly,
- 2.
3. Government provided the irrigation network, electricity, and pump without operational cost. Board member of GHIPPA are required to seek support from outside or develop self-help mechanism. So far GHIPPA Molo already using mechanisms thought inviting investors but ultimately failed because the harvest failed and profit sharing not happen. In the second year, Board of GHIPPA Molo borrowed from PNPM funds with subsidy interest rate, and so far it has been running, although not able to generate a profit because GHIPPA have obligation to return loan to investor.

4. **Rewards and Incentives that received by the member of board is still low, even in GHIPPA Molo.** As explained in the above, GHIPPA Molo already provide irrigation services but did not provide the advantages as described in the previous point. So far, the rewards are perceived by the personnel of the organization is limited to feeling valued as an active person in GHIPPA. So far, the incentives that obtained for some board member of both GHIPPA was come from fee when manage the phase II of the irrigation construction project - as implementing partner of government project, but this fee is uncertain. While the fee from the services of irrigation is not yet obtained. Nevertheless, the board saw that there is potential for considerable profit if GHIPPA can be managed properly. Especially if you see and compare with GHIPPA already run in the other villages. Potential of GHIPPA has seen by the member of board.

3.3.5. Helpful Mechanism

1. **There is no helpful mechanism to support GHIPPA.** As a new organization who were aged 6 months it is not surprising that GHIPPA has many internal challenges associated with common understanding among member in terms of planning, implementing, and monitoring and evaluation. Unfortunately, the support mechanisms to solve this problem has not yet clear. Because GHIPPA activities are still focused on completing the construction of the irrigation network installation of phase II, issues relating to the institutional aspects not stand out. Despite taking care to see that there may be a problem if GHIPPA unable to cope with operating costs mainly to pay for electricity and maintenance of irrigation channels. So far the fixed costs that must be borne by GHIPPA is for electricity costs at IDR 6-10 million per month. These costs will be increase if the electricity will use for irrigation. Estimated the cost will be at IDR 250-350 million during the planting season (for 3-4 months).
2. **GHIPPA not have a regular meeting schedule member of board of both HIPPA and GHIPPA to draw up a program of activities, monitoring, and evaluation.** The meetings were held over as a spontaneous response to resolve construction of irrigation network of irrigation project phase II or meeting were held by request of the government or external needs. The only mechanism that is taken if there any problem is by informal communication among the active member of board.

3.3.6. Internal Relations

GHIPPA member of board is village office staffs and farmers' leaders. GHIPPA's strength has recorded during the assessment is good personal relationship among active member of board and common agreement among them that the increase in production and productivity of rice should be increased. In general, they know each other and already engaged in farming activities before

GHIPPA established because mainly of them have the same background as the village office staffs and farmers.

Although member of board already knows each other, may contribution of them to develop GHIPPA are not optimum. This is because there is no fulltime staff who focus work to GHIPPA and other reason is the irrigation network is not yet covering all villages under GHIPPA.

3.3.7. Leadership

Circle of influence of the board leader was limited to influence one of the project team and the government. So far the role GHIPPA driven by the board and under the leadership of chairman of the board. Regularly meeting of board member is not running well. Coordination and communication is only done to the staff of the project and government. Nonetheless, the consultant noted some of member of board who have sufficient capacity to run the organization such as strategic communication to key stakeholders and the possibility develop collaboration to other parties

One of the most important factors of GHIPPA function well to provide irrigation service to farmer is sustainability, both of operational and financial sustainability. An organization can progress if it has a funding source of services provided to its clients (i.e. farmers). The success of the organization to support the funding need of the basic requirements such as the existence of the service is clear, measurable work programs, and the personnel to carry out the work plan of the organization.

To achieve these roles, GHIPPA need to develop the strategic planning for the sustainability of GHIPPA. In addition to some of the findings as described in the previous section, there are some important aspects that should not be overlooked and be important notes.

- The lack of experience of board member in managing the organization GHIPPA. This experience is not only about the aspects related to management but also related the technical aspect of the installation and construction of irrigation network and channels, maintenance of irrigation network and machinery and electricity, and further is to develop new irrigation network to cover all areas of GHIPPA villages.
- GHIPPA formed with many interested parties, especially from the government. This interest can also be seen from the value of assets and GHIPPA potential to earn money from GHIPPA services. The risks are many parties who may be involved and may interfere GHIPPA
- GHIPPA already have sizeable assets. However, with the existing assets can also be problems related to the ownership status of assets and how to manage it. In addition, to run the service GHIPPA need a source of funding, especially for the operationalization of the early stages. Based on experience the payment model of service from other HIPPA/GHIPPA,

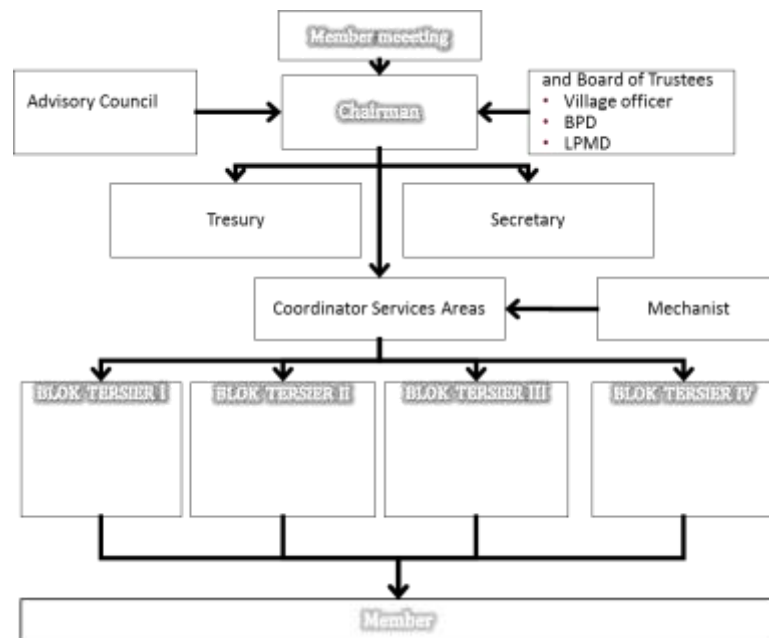
services will be paid after the harvest, if harvest success. That is, although theoretically, GHIPPA has the potential profit, the risk is also quite large. For the operationalization of the early stages, is estimated to require capital GHIPPA 250000-350000 million for one planting period.

IV. Recommendation

TIRTA support for GHIPPA Piyak and GHIPPA Malo may will support objective of TIRTA project in short time. These GHIPPAs have services area of 2000 ha and can be reach 5,000 farmers. Proven experiences from HIPPA Tirto Tinoto and Sumber Makmur that successful service of HIPPA could increasing of the farmer income more than 30%. Reflecting on the findings in the previous section, the following are recommendations that could be support by TIRTA to GHIPPA.

Although GHIPPA Molo already provide irrigation service to members but basically not much different kedadanya GHIPPA. Only from the aspect of assistance, the possibility of Molo faster because they can learn from their previous condition. In term aspect of governmnce and recourse managment, organization structure, finance, reward, and insentive is same condition.

4.1. TIRTA could provide support to GHIPPA to develop strategic plan and restructuring of organizational chart. Strategy and structure of organization are two things to be formulated in line. So far GHIPPA not yet to formulate of more comprehensive organization strategy, especially for long-term strategy. TIRTA's support to assist GHIPPA least in developing the organization's strategic plan document. This strategic plan is important in responding to the opportunities that are open in the irrigation business today and is predicted to grow in the future. The probability is their demand for irrigation services and expand its range of services in GHIPPA working areas. in regard to support functions of board member of GHIPPA and encourage good goverment of both GHIPPA, replication structure of organization of Tirto Tinoto is could to be inimitable with litle bit modification, this included division of roles of each part of the organization, as bellow:



Detail of task of each division could refer on 3.2. 3 section above

In regard to legality aspect, so far there are no standard rules related to HIPPA. Referring to the experience HIPPA Tirto Tinoto and Subur Makmur, legality of HIPPA by a notary and reinforced by the degree of the head on village and is known by the district government. Based on this experience, the establishment GHIPPA using by degree of sub-district and is known by the regents is very adequate. only later if the existing AD / ART, it should be certified by a notary.

4.2. TIRTA could help to develop the annual work plan. Viewed of the current conditions of GHIPPA and challenges faced by GHIPPA in the future, the consultant recommends the priority of GHIPPA annual plan as follows:

Year I.

Apart from improving the strategic planning and institutional structures as discussed in the previous section, management and funding issues of GHIPPA be the main focus in the first year. The irrigation assets that managed by GHIPPA is supported by government assistance. These assets can be a capital for GHIPPA to run the organization. However, GHIPPA not yet have a calculation of how income will be obtained and how operational activities will be run especially in 1st year to provide irrigation services. Moreover, based on model of other GHIPPA/HIPPAs, the income sources of GHIPPA are paid by farmers after harvest. This means that until the harvesting time (3-4 months), GHIPPA should be able to cover the operating costs from GHIPPA services. The next planting session will have started on April 2017. This is

importance that GHIPPA expected will get the fund to running their business until the end of March 2017. There are at least two sources of funding options, get fund from investors or get a loan from financial institutions. To support this target, TIRTA could support improve capacity of GHIPPA of knowledge, skills, and networks to link investor or financial institutions.

Year II

Expected in the second year, operations of GHIPPA already be funded by profit from GHIPPA services especially from irrigation service. GHIPPA relationship to all stakeholders will improve and well managed. In the second year, GHIPPA is expected has manage institutional and organizational development and form of service. In second year of support of TIRTA could be develop the monitoring and evaluation system of irrigation network and may develop new irrigation network of GHIPPA.

Year III – V

In Year III and then, GHIPPA is expected could improve and add new irrigation network for other village under working areas of GHIPPA.

4.2. Business Plan and Financial management. So far GHIPPA not yet have a business plan. Nonetheless, GHIPPA already have a market, that is farmers who need irrigation services. However, because the assets owned by GHIPPA is sourced from the government assistance is necessary to ensure that farmers have the same understanding about the sustainability of the service and the importance for farmers to pay for services. This because from similar government program, that perception of farmer, support from government is free. Therefore, TIRTA could support capacity building of GHIPPA through; a) identification and mapping of client -farmers, b) formulation of business plans, c) business management. Due lack of business plan of GHIPPA, cash flow projection, profit and loss and balance sheet cannot be predicted with accurately.

Below is summary of series of activities that could be done by TIRTA to support GHIPPA.

No	Activity	Month -2017												Remarks
		2	3	4	5	6	7	8	9	10	11	12		

1 Comparative study to other HIPPA x

This comparative study is important to see the experience of a similar organization, how the organization is growing as it is today. including to learn from experience how the HIPPA overcome various problems faced.

1 Support to develop organizational chart of HIPAA. This included develop AD/ART of GHIPPA x

Activities that can be supported is facilitating the the meeting of members to develop organization chart of GHIPPA, to clarify the divisions task, and to develop of AD / ART. This is also Included to ensure that involvement of stakeholders to encourage the development of GHIPPA, especially that GHIPPA was involved stakeholder from villages, sub-district and district officers.

(The output is AD / ART and the organizational chart)

2 Support to develop business plan of GHIPPA x

Each GHIPPA / HIPPA has unique environmental conditions, this is including the soil fertility where GHIPPA works that will influenced to land productivity and the profit sharing to HIPPA

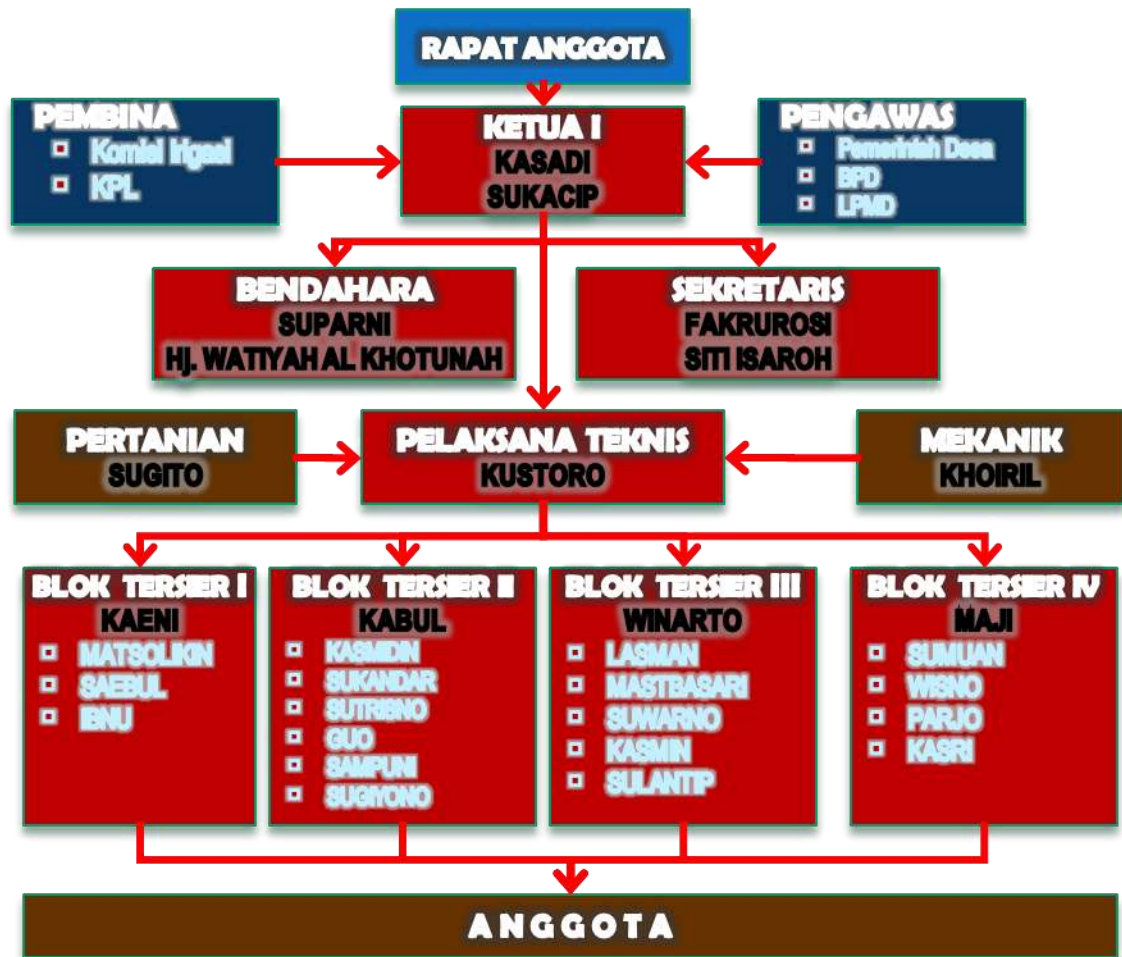
Reference

DFAT Australian Aid, 2014, TIRTA Irrigation Design Case Studies
European Communities, 2007, Institutional Assessment and Capacity
Development: Why, what and how? (Reference Document No 1)
Hippa Sumber Makmur, 2012, Profie HIPPA Subur Makmur
Hippa Sumber Makmur, 2012, Laporan Pertanggungjawab Pengggurs HIPPA
Subur Makmur

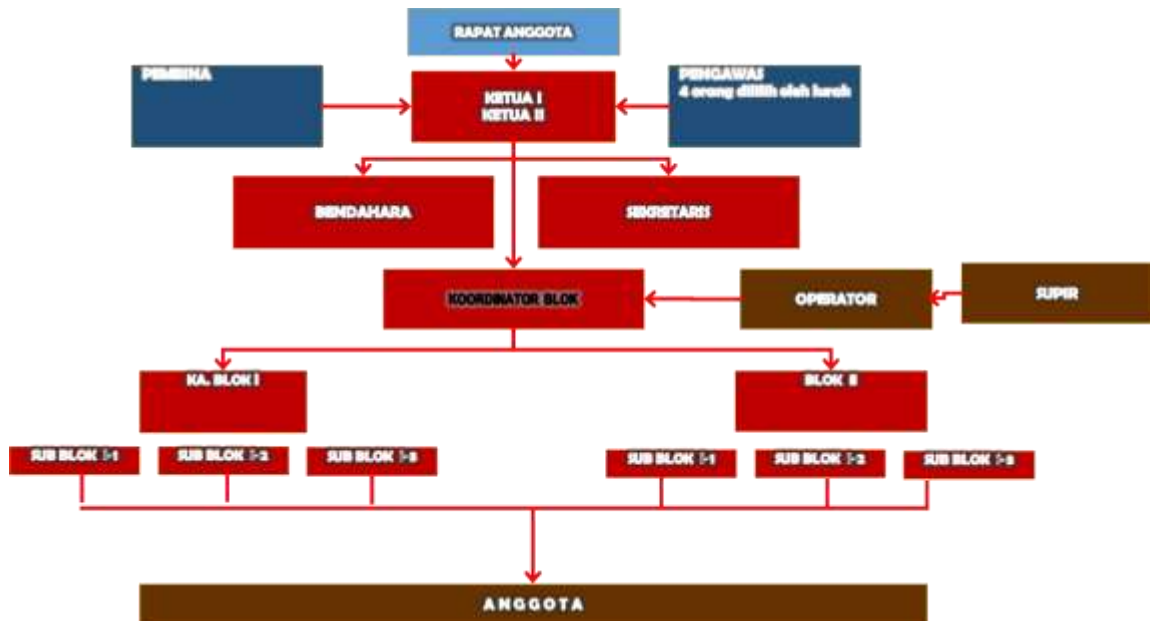
Other document

Deed of Establishment of Design, Auditing, Executive Team of G.HIPPA Kanor
Minute of Establishment of GHIPPA Sumber Barokah -Kanor 20160826
Profil HIPPA Tirto Tinoto-1

Annex 1. HIPPA Tirto Tinoto Organization Structure



Annex 2. HIPPA Subur Makmur Organization Chat



Annex 3. Curriculum for Comparative study

07.30 - 08.30	Go to HIPPA
08.30 - 09.00	Open seremony (pretest)
09.00 - 10.00	Peresentation of HIPPA and discussion
10.00 - 12.00	Field visit to HIPPA areas
12.00 - 13.30	Lunch
13.30 - 15.30	Discussion and lessons leant
16.00 – 16.30	Replication: is it possible ?
16.30 – 17.00	Action plan

Annex 4. Curriculum for Business Plan Training (2 days training)

Day 1	
07.30 - 08.30	Open ceremony Training expectation and objective
08.30 - 08.45	pretest)
09.00 - 12.00	Discussion on business opportunity on irrigation services and market situation
10.00 - 12.00	Lunch
12.00 - 17.00	Product development
Day 2	
07.30 - 08.30	Review day 1
08.30 - 10.00	Organization, product development, and marking
10.00 - 12.00	Finance and risk analysis
10.00 - 12.00	Lunch
13.00 - 15.00	Finance and risk analysis
15.00-16.00	Action plan