
PIP manual

A step-by-step explanation of the PIP approach

The creation and implementation of Integrated Farm Plans, with examples from Burundi



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Note

This manual will be improved continuously based on new insights. Comments and suggestions will be collected by Aad Kessler via: aad.kessler@wur.nl

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Photo cover: A female Farmer Innovator (PI) with her husband explain their Integrated Farm Plan (Cibitoke province, Burundi)

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Preface

This manual provides a step-by-step guideline for implementing the PIP approach: the Integrated Farm Planning approach (PIP from French 'Plan Intégré du Paysan'). The PIP approach finds its origin in Bolivia, where it was developed and first tested in the years 2000-2003, based on experiences with farmer participatory (research) approaches in Latin America. It was further developed in Burundi from 2013-2016 by the project "Fanning the Spark", locally known as the SCAD project (*Projet de Solidarité Communautaire pour l'Auto Développement*). The PIP approach in SCAD was tested and validated in three Provinces, namely Gitega, Muyinga and Makamba, under the direct supervision of Alterra (now Wageningen Environmental Research) in close collaboration with the local NGO Réseau Burundi 2000+.

The next phase in the development and validation of the PIP approach was done within the PAPAB project (*Projet d'Appui à la Productivité Agricole au Burundi*), where the approach was implemented at a much larger scale in six provinces of Burundi, and enriched with new components and experiences. In this revised PIP manual (a first version was developed in 2015 by the SCAD project), all experiences from 5 years working with the PIP approach have now been consolidated. Given that the PIP approach is expanding to other countries in Africa (Rwanda, Ethiopia and Uganda, plus several others expected soon), this manual is written as such that it can be used in any country. Therefore we have chosen to use "community" when we refer to the lowest organisational unit (in other countries called village, colline, hamlet, cell, or otherwise), and "district" when we refer to local government unit (in other countries called municipality, commune etc.).

It is very important to emphasize that the PIP approach is not a blue-print approach according to a fixed format; all the contrary, it is a very flexible approach that must be adapted according to the local conditions and context where it is used. Hence, the ideas and principles underlying the approach (as explained in Chapter 1) are applicable in any setting, but when practically implementing the approach (as explained in Chapter 2) each step should be discussed profoundly within the staff of the programme where it is used; and the approach adapted when necessary. This is also the reason why Chapter 1 should be compulsory reading for all staff members, and why we highly recommend to have profound discussions within the project staff about all PIP aspects before starting.

The conviction among the staff that the PIP approach will work, together with a very clear and realistic workplan, are essential to make a good start and achieve sustainable impact. However, working with the PIP approach often requires a change in mind-set at project level, particularly when staff (or partner organisations) are not familiar with participatory approaches focused on empowering smallholder farmers. Hence, fostering this intrinsic motivation and commitment within the staff is crucial, and considered one of the 10 success factors of PIP!

We wish you good luck with this manual and with implementing the PIP, and Wageningen Environmental Research (WENR), as the founder of the PIP approach, is always available to provide strategic guidance and further training!

1 The PIP approach explained

Sustainable land management is crucial to feed all people on our planet, because only healthy soils can produce the food we need. Smallholder farmers are key actors for food security, because they cultivate the land that feeds millions of people. When this land degrades and does not produce anymore, it will lead to food insecurity and the migration of these farmers and their families, seeking opportunities elsewhere. Avoiding this degradation and keeping the soil healthy is therefore essential; but this can only be achieved when these millions of smallholders are actually motivated and able to keep their land in a good condition. The focus of the PIP approach is therefore on PEOPLE and LAND, because we need motivated people who invest in their land - with good practices - to create and maintain a sustainable food production.

In the PIP approach, motivated people & healthy land are considered the foundation for sustainable development: only when farmers become good stewards of their land, and when they put the 'care for their land' central, they can establish resilient farming systems. The slogan of the PIP approach is "**proud farmers, better soils, more food**", and it reflects these three central issues in the approach: motivated people, healthy land, resilient farming systems.

Hence the objective of the PIP approach: to foster resilient farming systems, i.e. farms that can resist and recover from shocks (droughts, excessive rainfall, pest infestations, etc.), to continue producing food in a sustainable way. In the PIP approach we call this *resilience-based stewardship*: good stewardship of the land and farm by motivated farmers, who are committed to keep their land healthy, who are always busy (and aware of the need) to make their farms more resilient, eventually becoming sustainable entrepreneurs with income from their farm. The key tool in the PIP approach is the PIP itself, the Integrated Farm Plan that farmers make for their farm, with a drawing and an action plan!

1.1 Towards resilient farming

Achieving food security is still a major challenge in many countries in Sub Saharan Africa. Fundamental to increased food security is sustainable agriculture. This means that we need to manage our farmland in such a way that it continues to produce food for the current and future generations. Therefore, a good quality soil is needed; soils that are fertile, which have sufficient nutrients and organic matter, and that can absorb and hold enough water for the production of preferred crops. However, there is currently an enormous pressure on the land: farmers need to feed their families on increasingly smaller pieces of land, which leads to intensive and continued use of the land and the rapid loss of nutrients. Moreover, most farmland is not managed well: the production potential of the land, which used to be high because most soils are inherently of good quality, is rapidly declining. On top of this, droughts and more irregular intensive rainfall due to climate change have a negative impact on soil quality; this leads to increased land degradation, especially due to soil erosion. The decline in soil productivity and crop yield has an enormous impact on food and financial security: farm households are often in a vicious circle, in which the lower production of the land forces them to explore the land even more, and to start farming on land that is not suited for intensive farming (e.g. land on very steep slopes or on already far degraded land) without the required external inputs such as organic and inorganic fertilizers.

Numerous development programs have invested in agriculture in Africa over the past decades, but food production is not yet sustainable and land continues to degrade. A major constraint are often the top-down strategies of programmes, which fail to involve local farmers or to trigger their intrinsic motivation, leading to a lack of ownership and stewardship among these farmers. Furthermore, many of these projects do not implement integrated solutions, which are needed because sustainable food production depends on many different factors. Among these factors, and most important: farmers need to be motivated and able to invest in their land! This often implies a move from being a '*farmer by default*' (because there is no, or

hardly any other option) to being a *'farmer by choice'*, or a farmer entrepreneur. Even better when these farmers become a sustainable entrepreneur: i.e. farmers who are able to increase their farm income by being a (small) entrepreneur, but at the same time diversify their crop production, take care of their land, and have a resilient farm. And the best we can get is when such farmers start to collaborate, for instance in exchanging knowledge, building appropriate storage facilities to obtain better prices of their produce, and when they collectively implement better practices.

The PIP approach takes all above-mentioned aspects into account, and works towards resilient farming by investing in a solid foundation of Motivated People and Healthy Land. In the PIP philosophy it is essential to build this solid foundation first: only when farmers are good stewards of their land, can farms become more resilient and can food production increase without degrading natural resources.

1.2 PIP: the power of a plan

Before explaining how the PIP approach achieves to build this solid foundation (next section), we first present here the key tool that is used in the PIP approach: the PIP itself, the plan of the family, a drawing which visualizes the current situation of the farm and the desired future situation. Figure 1 shows an example of the huge changes that this family wants to bring about in just about 5 years!

Given that the whole family is involved in drawing a PIP, all family members will become motivated to implement the desired changes! Therefore, next to the drawings, the family makes an action plan in which they agree together what they have to do to achieve the desired future situation of the farm, and who is going to do what. And this is only one aspect of the power of the PIP approach: the real power is that eventually ALL families in a community have their PIP. This triggers that neighbours and friends start to discuss about their future, that



Figure 1. The drawing of the current farm on the left, and the desired future situation, the Integrated Farm Plan (PIP), on the right

they exchange ideas and innovations, that they enrich each other's plans, and that they eventually start to collaborate. Hence, the PIP drawings as shown above are only the start of the process!

Given the diversity of realistic actions planned in a PIP combined with a vision towards a desired future, PIP fosters a mind-set for long-term planning to achieve this change: instead of living and planning season by season or week by week, farmers start investing and planning years ahead! Furthermore, when almost all households have a PIP, collective action for better natural resource management can easily start, such as Village Visions drawn on paper, reforestation and restoration activities, and Collective Integrated Plans by sub-groups in the community. Hence, the PIP itself is the key for starting action, because it helps farmers to structure and plan what they want to achieve, and what they want to do where and when and with whom. Next to this the PIP itself is also dynamic: it can be updated whenever the family gets new ideas to advance towards resilient farming! As such, integrated farm planning becomes a habit, with families becoming eager to learn and proud of what they achieve. That's exactly what sustainable development needs!

1.3 PIP-principles

Building a solid foundation of Motivated People and Healthy Land is a process: although the PIP approach starts right from the start with concrete activities, it can take several months or years before the foundation is really solid. This is the reason that from the start continuously – during all PIP activities that the project carries out in a community – the following three PIP-principles are emphasized: empowerment, integration and collaboration. As these PIP-principles are key in building the required solid foundation, anyone working with PIP is encouraged to appropriate and profoundly understand these principles. This will allow being able to explain these PIP-principles whenever needed, especially in activities with farmers.



Empowerment

This means that in the PIP approach we take local actors (farmers) seriously and as equal partners in the project. It is crucial that farmers feel able to change their own reality, that they see the opportunities to improve, and that they create their own intrinsic motivation to undertake action. All along the PIP approach, in every activity, farmers need to see and feel that they can do it themselves, that they can learn how to solve most of their problems, and that we – as a project – only facilitate this process and provide them the tools to do so. Extension workers of the project are therefore facilitators: they don't teach farmers, but rather facilitate that farmers can learn and do it themselves, often in collaboration with others, in their family or in the community. When people feel empowered, they are able to change many things, and very important: they will feel ownership of this change and take the responsibility to better care for their resources and thus their future. This is one of the major changes induced by the PIP approach, and therefore one of the three PIP-principles.

Integration

Another crucial principle is integration: especially on the farm and in the household. This has everything to do with farm resilience, where different practices and activities make the farm more diverse and more resilient, but also mutually reinforce each other. The synergy that can be achieved by integrating different activities is enormous, and this is what farmers learn by doing while making their PIP. The more activities they include the better, and therefore it is very crucial that all family members participate in the drawing of the PIP, and that regular updates are made of the drawing and action plan to make it even more integrated. Learning, and the willingness to improve are essential personal habits related to integration: as a project we must always facilitate exchange of knowledge and trigger farmers to innovate and experiment. Stressing integration throughout the PIP approach, in each and every step and activity, is therefore crucial, and will strengthen and accelerate the whole process implementation!

Collaboration

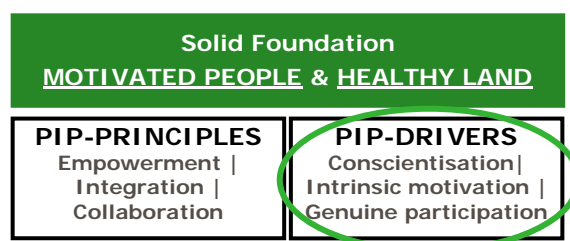
The third principle is collaboration, because only when farmers carry out actions together they can achieve impact at a wider scale: for instance at slope level (working together to implement soil and water conservation practices to stop erosion) or at community level (starting up a village knowledge centre or a storage facility). Collaboration will also enhance trust among people and strengthen social relations, and when people have better networks and friendships, they will be more willing to invest in their community, their land and to stay in the community, while having better access to markets. Collaboration is a basic need, and when collaboration and trust have increased, people will also exchange knowledge and learn from others to improve. In fact, all PIP activities aim at enhancing collaboration, at sharing knowledge, labour and machinery, and at developing the household and the community together.

1.4 PIP-drivers

Next to the three PIP-principles that construct the solid foundation, the process of change and working towards sustainable local development is driven by the three PIP-drivers: conscientisation, intrinsic motivation, and genuine participation. These drivers represent the three stages of growing “awareness” in a community, where people become gradually more aware of the problems that need to be tackled, why and how they should act (intrinsic motivation), followed eventually by forward driven and genuine action, together with others. These drivers must particularly be stimulated at the start of PIP activities (at community level), but remain crucial during all phases of the PIP approach.

Conscientisation

This refers to a kind of awakening, the awareness in people about their ability to transform their reality by conscious collective action. Conscientisation is the “critical awareness” that problems can be solved by their own actions, that the future can be better, and that doing this together has much added value. The PIP a very important role in this process of critical awareness or conscientisation, because it visualizes the future of the farm, how it can become, and it makes actions realistic and implementable (“we can do it!”). Dialogue is the means of achieving conscientisation, and this is done both within each of the families, but also at community level in all the existing organized groups (formal and informal). People will start talking about their PIPs, their visions, and what inspires them. In time, increasingly more people will become aware that it is possible to transform their reality, and how essential it is to start collaborating with fellow households or community members that have similar visions. Conscientisation within the PIP approach thus achieves that farmers recognize that they are capable of doing something about it themselves (closely linked to the PIP-principle “empowerment”) and is followed by intrinsic motivation to actually start acting.



Intrinsic motivation

Following (and during) conscientisation, farmers will become intrinsically motivated to undertake action. Intrinsic motivation, the personal willingness that drives people to improve and undertake action without being compensated with extrinsic motivators or incentives (like cash or food), is essential for development. Hence, where conscientisation focuses on becoming aware that change is possible and one's own ability to actually do something, intrinsic motivation leads to concrete action, and especially to ownership. This is particularly crucial for environmental-conscious behaviour and sustainable land management activities where initial costs often outweigh direct benefits. This has a lot to do with stewardship, e.g. caring for the earth because one feels the responsibility to do so. Intrinsic motivation makes the use of incentives or rewards needless! This is a fundamental aspect of the PIP approach: lessons from the past have shown that all kind of extrinsic incentives (especially gifts, cash and food for work) might destroy the intrinsic motivation of farmers to invest in their own future. Although in the PIP approach small rewards or compensations are given, these are never of a size that farmers would consider them an incentive. Hence, in the PIP approach we must always foster intrinsic motivation, and be aware of the negative effects of incentives, even if these are given by other programmes working in the same area.

Genuine participation

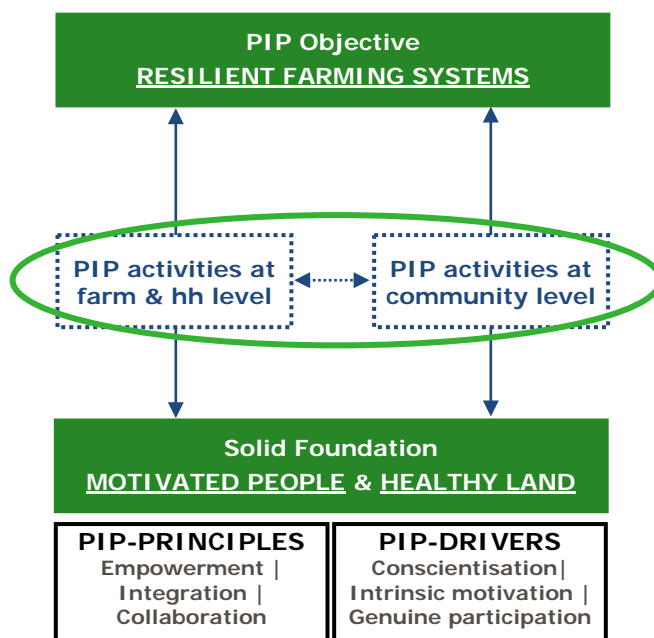
When farmers participate in (PIP) activities driven by the intrinsic motivation to change their future, they will do this genuinely, with more ownership of these activities, and the willingness to continue and work hard. This counts for activities on the farm, but especially also for collective activities. Genuine participation is thus driven by intrinsic motivation, and cannot be imposed on farmers or forced from the outside: they chose themselves to participate, and that is crucial for establishing a solid foundation. Furthermore, achieving wide-scale genuine participation is what is required to mobilize the whole community and ignite “the PIP fever”. This is crucial for sound (collective) natural resource management, and of course closely related to the PIP-principle “collaboration”. However, this requires a diversity of people, especially in the first group to work with in the PIP approach: the group of Farmer Innovators (PIs – “Paysans Innovateurs”

in French; see Chapter 2). The more diverse (social status, technical knowledge, farm type) this group of PIs, the more rapid genuine participation of other farmers will be achieved and the more convincing the PIP approach will be for all different groups in a community. Therefore male and female, old and young, as well as farmers from different socio-economic strata should be represented in the group of PIs.

1.5 PIP action at household and community level

Building a solid foundation by means of the PIP approach requires action at farm-household and community level. The details of these activities will be explained in the next chapters, but it is important to explain here that simultaneous and continuous action is needed at both farm-household and community level: only then we can achieve the objective of resilient farms and communities!

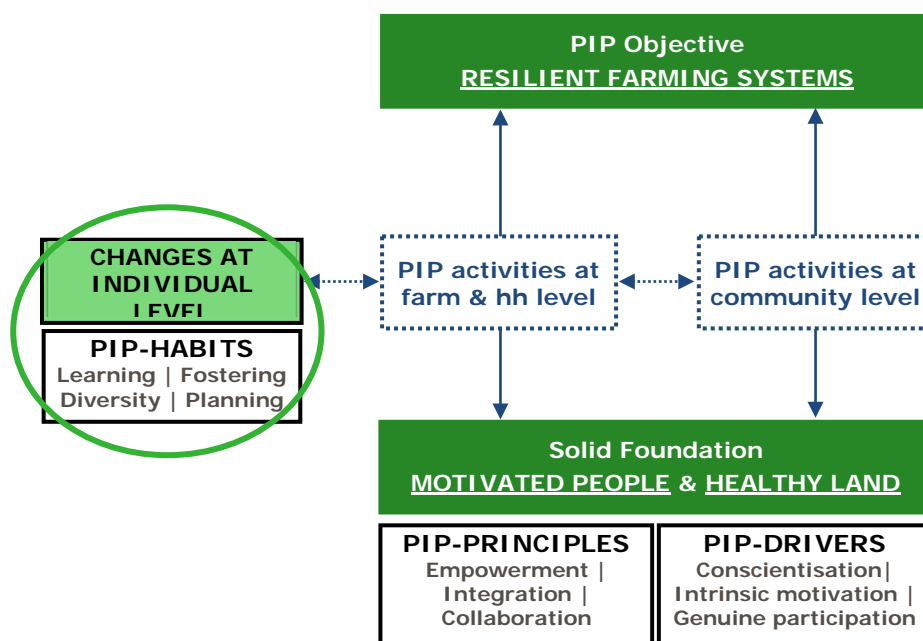
This starts at community level with awareness raising activities, meetings with community leaders, involvement of the Community Administrators, and everything needed to involve as many as possible community members from the start (see Chapter 2.1). This allows to do proper selection of the Farmer Innovators (PIs) at the very start of the PIP approach and train them in all aspects of PIP (see Chapter 2.2). However, most action takes place during and after the PIP competitions when all other families in a community become involved in PIP creation and implementation (see Chapter 2.3).



Within these households, the process of PIP creation is the real change agent. It brings more equality in the household as family members (husband, wife and children) make plans together and gain better insight into the assets and activities of each other. Furthermore, PIP creation triggers farmers to start experimenting with all kinds of integrated practices, to learn from others to improve the farm, and to undertake collective action to scale-up resilient farming, community wide.

1.6 PIP-habits

Working with the PIP approach will induce a major change in mind-set in all farmers, with different habits and ways-of-doing, going from “farming by default” without alternatives to “farming by choice” by creating land stewardship and sustainable entrepreneurs. In fact, by creating a PIP and implementing activities, the farmer family acquires the three crucial PIP-habits that are useful in anyone’s everyday life: learning-by-doing, fostering diversity, and planning. Acquiring these habits implies real changes in behaviour, in the way-of-doing things, and eventually in the way of thinking and perceiving. It will therefore not only affect how the farm is managed and how practices are implemented, but it will also have impact on other daily activities.



Learning

The creation of PIP inspires a process of mutual learning within the family, particularly because it triggers discussion on current problems within the farm household and the community: what these problems are, how they are related, how everyone has different perspectives, opportunities and aspirations and how the household members together can improve and develop solutions. Learning is therefore cross-cutting the PIP approach, and should be stimulated by the staff (the PIP facilitators) whenever possible, e.g. in helping a family to discover what can be done in the future to achieve a more resilient farm based on sustainable agriculture. PIPs are also often presented and discussed in groups of farmers, as such fostering the exchange of ideas and innovations. Given that most families in a community will develop their PIP, learning will continue, and farmers will become eager to learn from others and experiment with new ideas and alternatives. This willingness to learn and improve is crucial in life as one is never too old to learn, and never too old to teach others! The PIP has a key function in triggering this skill.

Fostering diversity

Crucial in the PIP is that it covers the whole farm, and even activities with other farmers or off-farm, with a diverse set of activities and the development of different skills. Developing a PIP that reflects this integration and diversity of activities and skills is something that is hard to achieve with the very first PIP developed by a family, but the insight that implementing a diverse set of activities achieves more, is a crucial insight that should be transmitted in each training session. Hence, in addition to the focus on agricultural activities, the PIP motivates the household to also include non-farm activities, with the future dream of each member of the family being the starting-point. As such, the family members will support the habit of fostering diversity: not only on the farm (with diverse crops and activities) but also in life, where diverse family members are complementary and can enrich each other. This rich diversity among people (men/women, young/old, and also people with diverse ideas or a different background) is also considered an important added value for resilience.

Planning

Together with drawing the dream PIP - the future farm situation - the family will create a plan with a time-schedule and financial investments to implement all these activities (generally within 3-5 years). This is the action plan: a set of tangible and visible activities on which the family has agreed together. Underlying and inherent to such a concrete action plan is the vision of the family towards the future: this in fact is the master plan, the common vision how to improve and make progress. It is this change in vision; this long-term planning and the provision of a new horizon with better living conditions and more food security, that triggers the family to invest and come into action. Planning is thus crucial in the PIP approach, both for short-term action and long-term vision development, and hence our slogan: *"Everything starts with a*

plan!". Similarly, planning is also crucial at community or catchment level, especially planning of land use and collective action to restore and conserve natural resources. Hence, although the name PIP refers to farming as main occupation, the habits that we identify as crucial to the PIP approach can be used by all types of household; just think about how to apply this to your own life, your own setting and conditions, or that of your organization and others!

1.7 PIP-enablers

Scaling-up is crucial in the PIP approach. From the initial PIs – who are the first to be trained in PIP – other farmers are trained via PIP competitions to reach the majority in the community, and eventually also adjacent communities. The more people create a good PIP, the faster change/impact can be achieved at a wider scale. But in order to really go to scale and reach also adjacent villages, it is essential that local institutions become involved, as this will give more manpower to implementing PIP at a wider scale (with local extension workers becoming involved) and it will give the possibility to connect PIP planning (especially at community level) to plans at district, region, department or province level.

This is why change at institutional level is also very much needed: to enable and support further scaling-up of PIP with good policies, formulated by politicians with a vision, and implemented by committed extension workers. Ideally, this collaboration leads to integrated watershed plans or landscape restoration plans, i.e. the integrated management of natural resources in a geographical space. The PIP approach is therefore instrumental for governmental institutions to implement their development plans in a sustainable way; it is an approach for awareness-raising, participatory planning, collaboration and – eventually – sustainable rural development. Therefore, the following PIP-enablers are required to be in place within institutions to create the enabling environment for PIP up-scaling: vision, commitment and good policies.

Vision

Change at institutional level starts with local politicians and decision-makers having a vision that takes into account sustainable natural resource management and the integration of actions for rural development. From the start of working with the PIP approach the project should try to involve local decision-makers in PIP activities, especially Open Days in the communities, and exchange visits to see and experience the impact of PIP by hearing testimonies of farmers. Mind-set change at this level usually goes slow, but it is crucial and at any occasion (workshops, seminars, etc.) the PIP staff and facilitators should talk about PIP and invite decision-makers to come and see the experiences for themselves.

Commitment

Likewise the PIP approach at household level, once awareness starts to grow about the need to act and about the benefits of PIP (also for local decision-makers), support to the approach and more commitment will follow. This is of course a slow process, but getting support and commitment (e.g. in the form of a budget from the local government, or payments to extension workers to stay involved in the PIP approach) are essential. In our experience, once politicians and decision-makers become more involved in PIP, their commitment will grow. Hence, again, exchange visits with politicians to PIP experiences are essential!

Good policies

However, what is absolutely required to scale-up the PIP approach and generate profound and sustainable widespread change, are good policies (or supporting policies at institutional level). This also includes more realistic plans at various levels, for example: district plans that take into account the village visions developed during the PIP approach. As such, instead of a top-down planning, community plans become integrated into plans at district level, and the formulation and implementation of the latter will become more participatory. Furthermore, ideally good policies will eventually be formulated at provincial and national level to further support and enable the scaling-up of PIP, and as such contribute to sustainable local development.

This is shown in the Figure 2, which visualizes the complete picture of the PIP approach: with all activities at farm-household and community level that contribute to building a solid foundation and to achieving the PIP objective of resilient farming, to the scaling-up of PIP to adjacent communities, supported by the required changes at institutional level that enable sustainable local development.

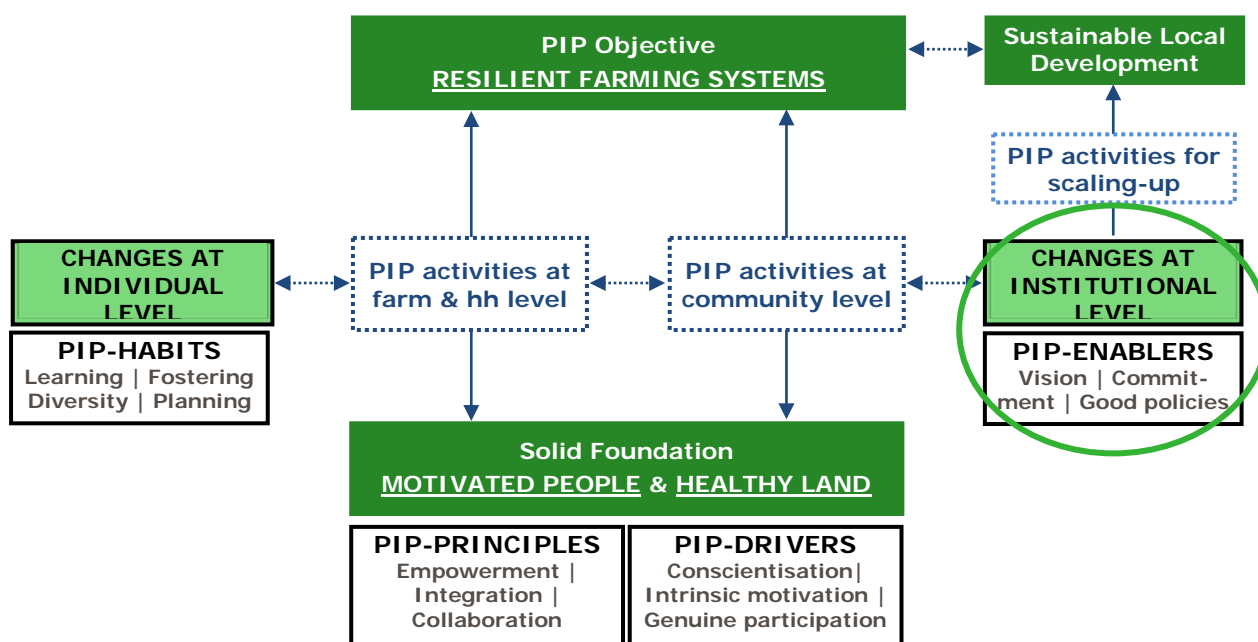


Figure 2. Overview of the PIP approach, with its solid foundation to achieve resilient farming systems

1.8 Success factors of the PIP approach

An Impact Study done on the changes and impact of the PIP approach in the Burundian villages where it has been implemented, shows the main success factors that make the approach durable and tailored to every individual situation:

1. **PIP responds to a need:** smallholder farmers do often have hardly any options to escape from the vicious circle of population growth, poverty, land degradation and food insecurity; so most people are open for 'change', and PIP responds to this need as a real opportunity for change;
2. **PIP focuses on empowerment:** farmers become aware that they can change their reality, that even the smallest plots are worth investing in, and that they have the capacity to do it themselves, even if they start with little investment power;
3. **PIP generates a family vision:** the PIP (the plan) is the catalyst for building a common vision within a family, accompanied by a change in mind-set within each family member; by visualizing the desired future in a plan, the sense of hopelessness is converted into a sense of hope;
4. **PIP stimulates integration:** activities in a PIP are diverse and together they are a total family package in which synergy is crucial; as each family member can include own realistic activities in a PIP, ownership of the plan is enhanced;
5. **PIP doesn't use incentives:** by eliminating incentives and financial rewards, PIP emphasizes that farmers can do it themselves; PIP takes farmers' own knowledge and capacities seriously (hence, intrinsic motivation always comes first!);

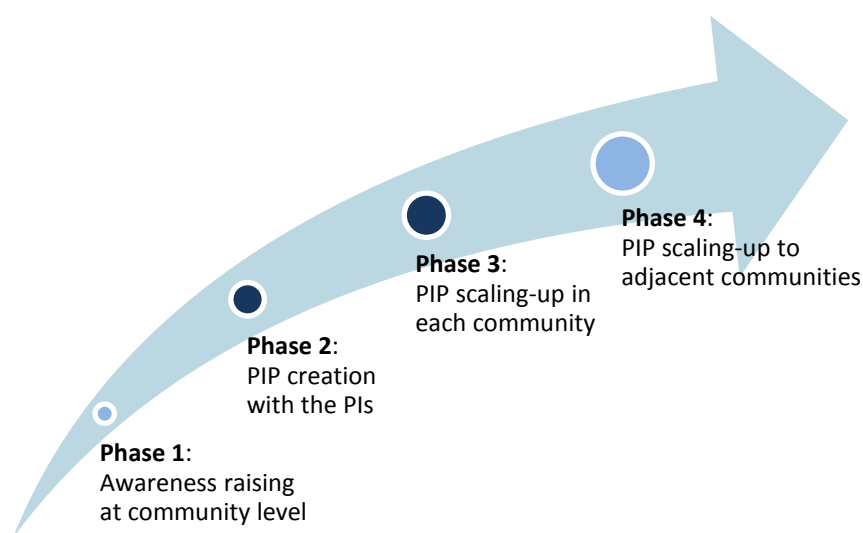
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6. **PIP generates short-term results:** the on-demand trainings focus on accessible crop and soil management techniques that can generate quick yield increase; this stimulates the intrinsic motivation to continue and motivates peers;
 7. **PIP triggers collaboration:** with enhanced social capital among farmers (trust, reciprocity, groups) collaboration increases; it is essential to show that doing things together and learning from each other is valuable (e.g. in the PIP competitions and farmer-to-farmer trainings);
 8. **PIP stimulates fast upscaling:** activities such as Open Days and exchange visits lead to rapid spreading of “the PIP fever” towards community level and beyond, with people genuinely participating, wanting to be part of the solution;
 9. **PIP engages institutional stakeholders:** policy-makers, influential stakeholders and the extension service are involved whenever possible, which is essential to create an enabling environment for further upscaling;
 10. **PIP works with engaged staff:** it is essential to have staff who fully believes in the approach and adopts a level playing field with farmers; such staff members not only transfer knowledge on agro-technical issues, but they foremost transfer passion and a vision!

It is very important that anyone using this PIP Manual is aware of the success factors mentioned here; these are crucial issues to memorize and recall whenever you do your work within the PIP approach. Sometimes it is difficult to explain why the PIP approach is different from the many other approaches that have been used in the past and still, nowadays. When confronted with this challenge, use the above-mentioned key factors to express what makes PIP different and successful!

Furthermore, in Annex 1 we have put testimonies of farmers that strongly support several of these success factors, use these examples also in workshops and when talking with people about PIP!

2 The PIP approach in practice

In this chapter, the implementation of the PIP approach is explained step-by-step. It consists of four phases with a logical sequence: every phase has its own importance, but the very important phases are 2 and 3, where the PIP approach is actually created (with the Farmer Innovators) and scaled-up towards the whole community. The attention given to Phase 1 will depend on the starting situation and how much motivated and organised communities are already when starting with the PIP approach. Similarly, Phase 4, the scaling-up to other communities, can take from one year to several years, depending on the objectives and the scope (and budget) of the organisation implementing the PIP approach.



The time suggested to spend on each phase is given in the box below. It is based on experiences in Burundi, but these can be adjusted according to the needs of the beneficiaries, the conditions in each location, and the scope and objectives of the implementing organisation. A more detailed overview of time schedule and activities as managed in Burundi is given in Annex 2 as an example.

Phase 1: <i>Awareness raising at community level</i>	- 2 months
Phase 2: <i>PIP creation with the PIs</i>	- 4 months
Phase 3: <i>PIP scaling-up in each community</i>	- 1 year
Phase 4: <i>PIP scaling-up to adjacent communities</i>	- 1 year

2.1 Phase 1 – Awareness raising at community level

Awareness raising at community level prepares for the start of PIP creation in a community (or village): it is the first phase of the PIP approach, and provides the fundament for further action. It consists mainly of a series of awareness raising sessions at community level, with an intensity that depends on the starting situation of the community. The activities focus on stimulating the PIP-drivers (see Chapter 1), hence, stimulating the process of *conscientisation – intrinsic motivation – genuine participation*. In this phase a start is made to work towards *genuine participation* of the whole community, which will be further strengthened during the implementation of all PIP activities in the following phases. This Phase 1 ends with the selection of PIs, the Farmer Innovators, who become the first group of farmers to create a PIP (in Phase 2) and subsequently train their fellow farmers (in Phase 3).

This phase takes about two months, and only in the case that the foundation at community level is really weak (e.g. bad community organization, low collaboration, etc.), awareness raising should be given more time, with repetitions of the main messages. The Box below provides an overview of the two steps in this phase.

Awareness raising at community level (Phase 1)

- | | |
|--|-----------|
| Step 1: Awareness raising activities | - 1 month |
| Step 2: Selection of PIs by the community | - 1 month |

2.1.1 Phase 1, step 1 - Awareness raising activities

The bricks of a solid foundation for sustainable development are the people in each community. However, evenly important for the solidity of this foundation, especially when starting with the PIP approach, is a well-organized community with sound levels of trust and collaboration. Therefore, the first activities focus not only at informing the people in the community about the project's activities, but mainly on strengthening the PIP-drivers that underlie and drive the PIP approach (*conscientisation – intrinsic motivation – genuine participation*). In order to work on strengthening the community foundation, **a set of five conditions** is suggested to measure the current solidity of the foundation in a community. Each condition comes with some specific evaluation criteria (Table 1).

It is recommended to assess these indicators when starting in a community, because they provide insight into the main weaknesses of the foundation and the kind of awareness raising activities that are needed. Such an assessment can be done roughly (quickly, to get an idea) or more in-depth, depending on the wishes and resources of the implementing organisation, and on information that is already available. When starting in a community where your organisation has never worked, this exercise should be done anyway and more in-depth before starting with the next Step 2 in this Phase 1. If the community is already known to your organisation this first step of awareness raising can be done more quickly.

Table 1. Conditions and evaluation criteria used to measure the current solid foundation in a community.

Required Conditions	Suggested evaluation criteria
1. Good organization and leadership: <i>aiming at improving the community organization, with adequate leaders who are chosen democratically;</i>	<ul style="list-style-type: none"> - A community/village board with responsible people - People agree with decisions taken by the board - There are several functioning groups in place - The village councils with committed leaders
2. Responsible participation: <i>aiming at making people feel committed to the development of their community, counting on their active participation;</i>	<ul style="list-style-type: none"> - Active participation in the community - Equal participation; women have room to speak up - People don't ask for money/presents to participate - There is intrinsic motivation to participate
3. Effective collaboration: <i>stimulating group-work and collective action, starting the process of critical awareness in this Phase;</i>	<ul style="list-style-type: none"> - Good level of collaboration during group work - People have the spirit to work together - A large number of groups are formed and active - Problems are solved at community level
4. Mutual trust: <i>between the community members, but also between the staff and the community members, with sincerity and transparency;</i>	<ul style="list-style-type: none"> - There are no big conflicts in the community - There is no/few stealing of crops/other resources - A cooperative attitude towards the staff of the project - People share confidential information with the staff
5. Environmental awareness: <i>referring to awareness and basic knowledge regarding natural resources, together with the willingness to conserve them</i>	<ul style="list-style-type: none"> - People are conscious to conserve natural resources - People have basic knowledge on natural resources - Voluntary investments in conservation - People discuss problems concerning natural resources

The following box gives an example of the structure and sequence of the awareness raising activities as carried out in Burundi, where the project started in communities that were already quite well-known to the

project. Hence, the time taken for this Step 1 was relatively short (1 month) with activities mainly focused on theatre sketches for awareness raising concerning natural resources management and other related issues. In these sketches, which are typical and well-received in the cultural setting of Burundi, farmer groups from the community showed during a kind of contest their perspective on environmental problems and solutions. However, awareness raising activities are of course different in every country and depend on the experiences of the staff of the organisation with certain awareness-raising tools. Furthermore, as already mentioned, time taken for this step depends on the current level of awareness in the community, and the need to strengthen this foundation. Whatever the case, the importance of this step should not be underestimated and awareness-raising should continue until a stable level of understanding and willingness to participate (intrinsic motivation, genuine participation!) is reached in a community.

Week 1: Inform leaders about the project, and have a first meeting to brainstorm on problems and solutions, the ideas behind the PIP approach, as well as the planning of the next activities.

Week 2: Community leaders inform their communities/villages, after which they select farmers to prepare the sketches about the suggested project activities (and environmental problems).

Week 3: Visit the different sub-communities, have participatory workshops there to raise awareness and discuss about environmental problems and related issues, which can be enriched with a first presentation of the sketches prepared.

Week 4: The official opening of the project is done with some of the best sketches (see picture at the right) with participation of some authorities from the district or provincial level.



2.1.2 Phase 1, step 2 - selection of PIs

Once a satisfactory level of awareness is reached, preferably in each of the 5 conditions, next is the selection of the Farmer Innovators, the PIs. This selection is a crucial step in the PIP approach because the PIs are absolute key persons! The PIs are chosen by the community members themselves, based on criteria such as: being a forerunner farmer, being trusted by the local community, having a long-term vision, willing and able to experiment on the farm, being innovative, etc. Often during awareness raising in Step 1, such dynamic and innovative farmers can already be identified, and suggested for selection to the community. However, final selection **MUST** be done by the community, as participatory as possible, based on a clear awareness concerning the kind of PI that is needed, and why; this will greatly enhance ownership and future success with the PIP approach, and avoid conflicts within the community.

The time schedule for this month of activities is roughly like this:

Week 5: Awareness raising workshop with the community leaders for the PI selection. The role of the PI is explained, and selection criteria are discussed in groups (known criteria but also criteria suggested by the community). They finalize by agreeing on the PI criteria.

Week 6: PI selection is done by the community, e.g. in a Community Assembly, but as much as possible with active participation of the majority of the community (hence the importance of solid awareness raising activities in Step 1!).

Week 7-8 : Home visits by the responsible project staff (generally the local PIP assistant or extension worker) to the selected PIs to check their farms, gauge their commitment, and confirm their adequacy and availability to become a PI.

Concerning the PI selection criteria, **four main criteria** with associated indicators should be used anyway during the PI selection process, as these are most important:

1. **Social status in the community:** how well is the farmer socially accepted by others? Does s/he have a solid social standing, a good reputation, and seen as a neutral person by most of the community?

-
2. **Forward driven attitude:** to what extent does the farmer have a drive to improve? This not only refers to innovations in farming, but also in other activities, showing a willingness to make progress.
 3. **Farm performance:** how well does the farm perform, also in comparison to others? How committed is the farmer to agriculture, are there innovations on the farm, and best practices?
 4. **Willingness to innovate:** is the farmer willing to experiment with new practices, to take some risk to improve and invest in the farm, and to set aside old convictions and beliefs?

Once these main criteria have been discussed, the community leaders (or the group with whom the criteria are discussed) should be requested to give additional criteria that they consider important. Once done, the following **additional criteria** can be suggested and discussed as well:

1. Having a positive attitude (often related to a forward driven attitude)
2. Being a trustworthy person, being respected (often due to having fulfilled leadership functions)
3. Coaching capacity, be willing to train others
4. Age / gender (aiming to have a mix of young & old - men & women)
5. Literacy rate (being able to read & write), not necessarily all PIs, but at least the majority
6. Living in the community, being committed to stay (no intention to migrate)
7. Having land titles, no land conflicts with neighbours, size of land can also be important!
8. Distribution of selected PIs in the community (geographical distribution)

Most important is that a broad consensus is reached in the community about the PI selection process and the selected PIs. This selection may take up to one week, followed by a next session or meeting organized at community level to present the selected PIs to the community and get approval.

During the final step of the PI selection, the staff carries out short visits to the homestead of each PI. This activity takes about two weeks. It is estimated that a number of 20-30 PIs is a good foundation for the PIP approach in a community. Selecting more than 30 potential PIs at the beginning will help to avoid the need of looking for others in case the home visits performed by the staff indicate that some proposed PIs are not good enough.

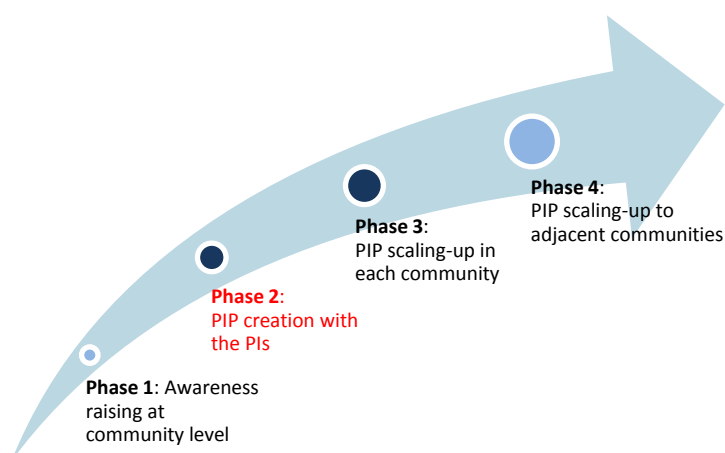
An experience from Burundi:

The selection of the PIs is a crucial step in the PIP approach because the PIs are key to further implementation of the PIP approach. During the assembly meeting in the village of Rwezamenyo, PIs were rigorously validated by the community. As a result, eight (8) PIs previously selected by the community leaders were replaced by other (potentially better) PIs during the assembly. Next, during the home visits with the project staff to all selected PIs, another four (4) of them were removed from the list because they didn't fulfil the criteria. Eventually we ended-up with 21 PIs in this village, which was a good number to continue with

2.2 Phase 2 – PIP creation with the PIs

The second Phase of the PIP approach aims at creating the Integrated Farm Plans (PIPs) with the group of PIs (in about 1 month), and implementing some of the planned PIP activities during a first growing season (length depends on the area, but let's say 3 months). These 4 months for the whole phase is the minimum time needed, and was done as

such in Burundi in any of its two rainy seasons. However, if time allows and depending on the local conditions more time can be dedicated to this phase, especially when dealing with only one (longer) growing season, often in more semi-arid conditions.



In order to reach common awareness and understanding about the PIP approach, during the first 3-4 PI training workshops both husband and wife (i.e. the selected PI with his/her partner) need to participate. This is very beneficial for the process of PIP creation within the family of each PI, especially because there are not yet other examples of PIP in the community and people can be sceptical at the beginning. It is recommended that both husband and wife participate together until the moment that the PIP-principles are well-understood (in step 2), so usually until day 4; however, more days would be even better!

PIP creation done with the group of PIs is basically the same as PIP creation in later phases (the scaling-up phases, see 2.3 and 2.4). Hence, intensive training in this Phase 2 is essential in order to enable PIs to repeat all the steps themselves during scaling-up activities, particularly during the PIP competitions with their own groups that will follow soon after the PI trainings. The Box below provides an overview of the different steps in this Phase 2.

Phase 2 : step-by-step

Step 1: Raising awareness among the PIs	- 1-3 days	} about 1 month
Step 2: Explaining integration in the PIP	- 2 days	
Step 3: How to create the PIP and its action plan	- 2-3 days	
Step 4: Creating the PIP at home	- 2 weeks	
Step 5: Discussing and evaluating the PIPs	- 2 days	} about 3 months
Step 6: Implementing PIP activities first growing season	→	

To enhance the understanding of the PIP approach during this phase and to have materials as reference to the technical trainings, PIP learning materials are crucial. Depending on the context and the literacy of farmers, several tools can be made and used to explain the background of PIP (drivers, principles, habits) and the PIP creation process. In Burundi the PIP leaflet and the PIP image box were used, which were both given to the PI as a reference and for training fellow farmers in the scaling-up phases.

The PIP leaflet is a short 12-page, step-by-step guidebook with drawings, which explains the sequence of the PIP creation and trainings (in Burundi supplied in Kirundi; Figure 3). **The PIP image box** (Figure 4) is a box with drawings in A1 format that explain each step of PIP creation. After the PI training in this phase, the PIP image box stays at the homestead of the PI, where it can be borrowed by any farmer of

the 2nd/3rd generation who wants to use it for further training of other farmers in next phases. A complete overview of all images and an explanation is given in Annex 4.

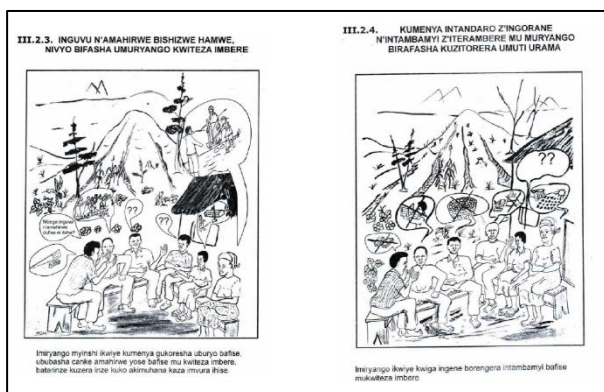


Figure 3. Two pages of the PIP booklet (in Kirundi), a guidebook of the PIP approach for PIs in Burundi



Figure 2. Two examples of sheets of the PIP image

2.2.1 Phase 2, step 1 – Raising awareness among the PIs

The first essential thing to do with the PI group is to have discussions and exchanges of opinions about current problems and resources in the community. When this is done in a group, it enables them to open up and have these necessary discussions within the group. This helps to raise awareness among them about the current situation, the underlying causes of problems and challenges, and the available resources (labour, tools, and finance). If done well, these discussions also strengthen the cohesion in the group and create a common understanding and awareness about what needs to be done in the community and the urgency to undertake action. Furthermore, during these discussions, the PI group makes a start in getting to know each other better and in becoming a coherent group. Eventually, a high level of genuine participation, based on conscientisation and intrinsic motivation within the PI group is essential: hence, the awareness and realisation that *“yes, we can change our reality by means of collective action”*.

This step can take one to three workshop-days, depending on the existing level of awareness, the number of discussion issues raised and the progress made. During these workshops, open discussions are essential, with the facilitator assuring that all participants in the group (also the non-talkative ones, and the women) are given room to talk and express their opinion about all possible issues, and give suggestions for potential or already known solutions. Given that the PIs have also been chosen based on their innovative capacity, there is a lot of local knowledge among the PIs that can and needs to be exchanged and discussed. It is for this reason that the workshops with the PIs in this phase take longer than in the next phase when this first step of awareness raising is repeated with the 2nd and 3rd generation farmers that are trained by the PIs during the PIP competitions.

Given that during this first step both husband and wife are generally present, it is also the best moment to discuss gender-issues in the workshop. This can best be done with the “family tree” exercise, which each PI must do later at home (see 2.2.3 – Step 4), but should be explained in this Step 1 now that both husband and wife are present. The family tree is used to look at gender aspects at household level and to identify commitments of male and female members to reduce inequalities. It is used mainly to start a dialogue that results in positive changes in the relationships of family members, and it allows women to feel more free to express their vision in the next stage of the PIP creation. Hence, in this step the family tree itself and how it is made are explained, and a short exercise can be done with the PIs and partners to see if they have well-understood how to do this later at home.

Next to this, the participants of this workshop should be stimulated to have similar discussions at home about the issues discussed in the workshop (with their other family members), as these interactions prepare the household for the drawing and creation of the PIP in the later steps, where their active participation is required.

It should be emphasized once more that the group of PIs is extremely important throughout the whole approach, and that the PIs are key drivers of PIP in their community; hence stimulating the **three PIP-drivers** in this step is crucial, as it will lead to the genuine participation of all PIs! This is accompanied by explaining the **three PIP-principles**: empowerment, integration and collaboration. As shown in Chapter 1, both the PIP-drivers and PIP-principles are essential for the building of a solid foundation, and this step 1 is the first opportunity to talk about them! There is no fixed format how to carry out activities in this step, given that each facilitator will do these workshops according to own experiences and knowledge. However, taking sufficient time for this step, and using a variety of participatory tools to involve each and every PI in the discussions, is highly recommended!

How PIP was explained in Burundi:

After brainstorming and awareness raising how to achieve the long-term vision, we explained that there is a new approach. The most important elements of PIP that were explained:

- the 3 PIP-principles (empowerment, integration and collaboration)
- the 3 PIP-drivers (conscientization, intrinsic motivation and genuine participation)
- the power of a plan: the current and desired future situation
- the three PIP-habits of a PIP farmer (planning, learning, fostering diversity)
- the 7 categories of activities covered by a PIP
- the slogan of PIP: Proud farmers, better soils, more foods
- the PIP greeting: Let's help each other, let's all develop together!
- The quote: do what you can, with what you have, wherever you are!
- In Burundi "PIP" is translated to Kirundi "Mboniyongana": I see where I want to go!

2.2.2 Phase 2, step 2 - Explaining integration in the PIP

In this second step, in which still husband and wife participate, most important to explain is the aspect of integration, because this is what eventually should be expressed and elaborated on in the PIP. The facilitators must therefore prepare examples of integrated (natural resource) management in order to make clear what integration means. While explaining, it should be stressed that **a PIP covers 7 categories of activities**, covering all agricultural plots of the household, livestock, as well as other aspects inherent and important to the household. Planning activities in all 7 categories, and integrating them on the farm will lead to increased production and more resilient farming systems: this should be the main message of integration!

Examples of integrated management

- Cultivation of food crops to sell them at the market and use the money to invest in livestock so that the manure can be used to increase the fertility of the soil.
- Knowledge gained during trainings on crop production and land management is used to diversify crop production and invest in a kitchen garden, aiming at improving the nutritional- and health status of the family members.
- Implementation of contour lines and soil and water conservation measures, leading to higher production. The additional income can be used to buy improved seeds for next season.
- Building improved stables for livestock, which will permit to collect manure to be used as fertilizer on the land, leading to higher production rates. The additional income gained can be used to buy bricks to improve the construction of the house.
- A training in basket making is used to diversify and increase family income. The additional income will be used to save for a motorbike, which in a later stage will permit to gain access to a market and sell crops and baskets.

The following seven **categories of activities** are all considered in a PIP, and ideally each household member has to be involved in one or more activities in each of these categories:

1. **Crop production:** aiming at producing more and better quality crops (including horticulture), improved planting patterns, improved seeds and new crops (market-driven), pest management, etc. More nutritious and diversified crops are essential to satisfy the nutritional needs of the household members (especially small children). However, within PIP farmers are also stimulated to specialize in at least one cash crop for the market, which should be explicitly mentioned in the PIP. For some, this will be too difficult when they create their first PIP, and focus is on securing basic food security for the households; however, emphasizing that this is important and can be included also at a later stage in the PIP, is essential.
2. **Land management:** aiming at protection of the land and maintaining its productive capacity. This includes Integrated Soil Fertility Management (ISFM), i.e. the combination of improved organic, green and chemical fertilizer, construction of contour lines, soil and water conservation measures, vegetative measures, (agro)forestry, rainwater harvesting, mulching, compost pits, etc. The saying is with a reason: *Good seeds will only produce on good soils!* The physical land management practices (more labour intensive) might require the collaboration of several families (e.g. on a slope); already planning for this in a PIP – and expressing the need to collaborate - is very good! Other agronomic and vegetative measures, as well as the soil management practices, are generally planned with priority and can most often be undertaken on a very short-term.
3. **Livestock rearing:** aiming at an optimal number and mix of animals with emphasis on health and nutrition (fodder availability and quality) aspects, value of the animals, production and use of manure, construction of reservoirs, fodder production, improved stables, improved breeds, etc.



Figure 4. An example of a final PIP from a 2nd generation farmer in Burundi

4. **Additional income generation activities:** aiming to derive income from either new activities (e.g. farmers become non-farm related entrepreneurs such as tailor, civil servants, teacher, carpenter, pottery/baskets making, etc.) or from doing additional activities that turn farmers into farmer-entrepreneurs by e.g. obtaining better market access and prices, brokering for transporting to the market, bricks fabrication, construction works, bee-keeping, and collective activities that allow to get loans to allow to purchase agricultural inputs and permanent structures like stables.
5. **Farm household activities:** aiming at fulfilling basic needs (drinking water, improved housing, hygiene) and a healthy environment (improved stoves, etc.), roof water harvesting, fencing, etc.
6. **Training activities:** aiming at learning specific skills for the above listed activities. Other examples are sewing, food processing, book keeping, and inputs/outputs recording which is crucial for optimizing resource use efficiencies.
7. **Other activities:** aiming at public or society, e.g. land and nature conservation, and voluntary work such as involvement in a Village Saving Loans Association (VSLA).

During all the explanations in this step, of course it is essential to use good examples of integration on the farm (e.g. Figure 5, more examples of nice PIPs are given in Annex 3) or use the drawings from the PIP image box. These will inspire the PIs and give them a better idea of what a final PIP may look like, with the different possible activities covered in a PIP. Especially for reaching the illiterate farmers, it is necessary that the facilitators use a lot of images and storytelling.

The activities in this step thus mainly aim at discussing as much as possible existing experiences in the group, and relate these to the PIP-habits and PIP-principles. As generally both husband and wife will still be present during this step, both will learn and become aware about PIP and possible innovations (primarily based on local knowledge!). These discussions are very motivating to start with farm innovations in an integrated way of thinking! It is important to repeat these knowledge exchanges in following workshops with the PI group (see steps 3 and 4) because each time new ideas will emerge among the participants, especially once they start drawing and creating their respective PIPs.

2.2.3 Phase 2, step 3 – How to create the PIP and its action plan

This third step is fully focused on explaining the process of PIP creation, using as much as possible the theory and logic underlying the PIP approach as explained in Chapter 1. It is thus absolutely essential that the (project) facilitators/trainers of these workshops manage the PIP approach very well in all its aspects! This is also the reason that this step takes 2 full days (or even 3 days, depending on the speed of learning and level of understanding of the PIs), because doing exercises for each activity in this step is essential.

This Step 3 is also the moment to start explaining and discussing about the role of the PIs, and particularly important is to emphasize the **three PIP-habits**: planning, learning and fostering diversity. These must be discussed profoundly when talking about the role of the PIs, and be repeated frequently during all following workshops with the PIs.

In this step, the PIs first receive an explanation of each activity involved in PIP creation, and next they do a simulation exercise to practice if each activity is well-understood and if they are able to explain it well when they have to do this at home with their family (and later of course in the PIP competitions during the scaling-up phase). The specific activities for PIP creation are the following:

1. Explaining the purpose and background of PIP;
2. Drawing the actual situation of the farm;
3. Drawing the “family tree”;
4. Making an inventory of skills, assets and aspirations of all family members;
5. Drawing the desired future situation of the farm (the “dream PIP”);
6. Making the action plan.

1. **Explaining the purpose and background of PIP:** This is crucial to practice well during this step, and each PI must be able to explain with his/her own words what the PIP is about and why it is important. Of course – at this stage – the PIs have already discussed a lot about all PIP aspects, but explaining it yourself could still be a major challenge!
2. **Drawing the actual situation:** Now actual drawing starts, and each PI can practice for his/her own farm how to draw the current situation. This can be seen as the baseline, i.e. the starting point, to also realise what they already have. If farmers own several plots which are not located near each other, it's best to draw them all together in one drawing, to have an overview of all the plots in the farm. Also land that is rented for a longer time can be put on the drawing. The drawings can be shared and discussed with the other PIs, as such achieving that all of them understand well what should be in the drawing.
3. **Drawing the “family tree”:** This was already explained in Step 1, so here it is sufficient to do a short rehearsal and emphasize that it is important to draw the family tree once more at home!
4. **Making the Family Sheet:** This concerns an inventory of the family members' aspirations, skills and capacities, which is crucial to stimulate discussion about opportunities and challenges in the family, as well as to energize the household members to express their goals and aspirations. The first exercise with the PIs is a simulation in small groups in which they make a list of aspirations as if they were members of the same household, based on the seven categories of activities of a PIP (see 2.2.2). Important here is that the PIs understand that this inventory of aspirations also provides the basis for drawing the future PIP, and serves as a kind of baseline of the initial situation of a household. The second exercise for the PIs is a similar simulation in small groups of the SWOT analysis (Strength, Weakness, Opportunity and Weakness), both for the household members (name, age, main occupation, income, skills, capacities) and for the farm (land tenure, number of livestock, equipment, and other belongings). The purpose of the SWOT analysis and how it works should receive solid attention during this PI workshop!

5. **Drawing the desired future situation of the farm:** After the Family Sheet the PIs will make the drawing of the desired future situation: the dream PIP. In general a time horizon of between 3 to 5 years is chosen for the dream PIP. The actual situation and this future vision together show clearly the desired changes over the period of time chosen, and provides energy to start realizing the PIP. Although each PI will make the real future plan in the next Step 4 with all family members, in this PI workshop it is very important to discuss and exchange ideas! As an exercise, again the PIs work in small groups (simulating a household) and start drawing the future vision on a sheet of paper, based on all aspirations. This then is presented and discussed in a plenary to assure that all of them have the same understanding. Most important that all PIs get the chance to draw and practice how this works, even if they think that they are not good in drawing!
6. **Making the action plan:** Planning is crucial to the PIP approach: *everything starts with a plan!* It is important that farmers learn HOW to plan, and therefore a first exercise is done during this PI workshop. This can be done based on the draft dream PIP of each PI, or based on a finished PIP dream which is taken to the workshop as an example. Most important is that each PI can practice with making a detailed planning of activities, and that they well understand the essence of making an action plan based on the seven categories of activities of a PIP, and the actions to undertaken by each family member.

2.2.4 Phase 2, step 4 – Creating the PIP at home



Figure 5. Roles and responsibilities drawn on a big paper

Once the activities for PIP creation are well-understood, in this next step each PI starts to create his/her own Integrated Farm Plan with ALL family members, including the children. This step is therefore done at home, where all activities describe in 2.2.3 are repeated for the real situation! Although the PI is obviously in the lead and facilitates PIP creation at home, all other family members must participate and help in writing-up ideas, suggesting activities, and defining roles & responsibilities of the family members on sheets of paper (Figure 6).

Given that the PIs will have to present their PIPs during the Open Day (a day for other farmers to get introduced to the PIP) the PIP of the PIs is drawn and created preferably on an A0 format which enables better visualization of what is planned. Also the action plan is drawn on one or more A0 sheets of paper (Figure 7), which the PI (together with the PIP) can put on the wall of the house,

which makes it visible for themselves and for visitors, and is a trigger to pursue with the realization of their dream PIP, especially within the household itself.

Because some farmers will want to establish quantifiable goals while they are not yet trained in the required improved farming methods, it is suggested that the facilitator prepares an information sheet for the PIs, which shows the needed inputs (e.g. fertilizers, spades, etc.) and outputs (production, crop residues, compost, etc.) for the different categories of crops and land management activities which are well suited for the area.

Even after creation of the PIP at home (in this step), it is normal that more and new activities will be included in the PIP drawing or in the action plan, based on new insights

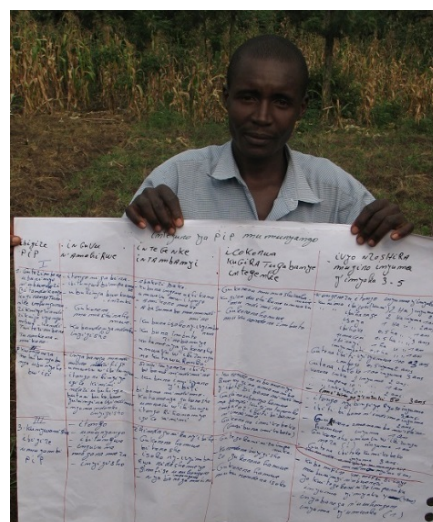


Figure 6. Example of an action plan

of the family members (e.g. after having seen innovations elsewhere or after a training on a specific topic). Farmers can thus continuously enrich and fine-tune their PIP, or they can make a new drawing if paper is available: a PIP is dynamic! An example of a part of an action plan is provided in Table 2; often farmers also include the costs of the required means in their action plan, such as for the banana stems in this example.

Table 2. Example of one goal and activities linked to the goal within an action plan

Goal	Activities	Where	Means	Source of the means	Whom	When
50 improved banana	Grow 20 stems in year 1	The plot close to the house	<ul style="list-style-type: none"> - Stems, - Fertilizers - Compost - Manpower 	<ul style="list-style-type: none"> - Buy them from a neighbour - Make 2 compost piles, collaborate to dig holes for growing banana 	Sarah and Ben	November 2019
	Grow 30 stems in year 2	The plot further away	<ul style="list-style-type: none"> - Stems, - Fertilizers - Compost - Manpower 	<ul style="list-style-type: none"> - Find the stem in my field - Increase compost piles, collaborate with our VSLA members to dig holes 	Sarah and Ben	November 2020

2.2.5 Phase 2, step 5 – Discussing and evaluating the PIPs

After the PIP creation at home, the final step of PIP creation covers again 2 workshop days with the PIs together. On the first day the PIs have the occasion to exchange and present their final PIPs and action plans and enrich each other's plan with new ideas that allow to enrich the PIP with other activities that were not yet considered. This will increase the motivation of the PIs and stimulate them to update and improve their PIPs. Something that can be encouraged during this evaluation is that PI households start working together on certain activities (for instance in buying quality seeds and fertilizers together) and to stimulate each other in realising their PIPs.

On the second workshop day the evaluation of this Phase 2 is done and follow-up activities are discussed. This concerns mainly the implementation of the PIPs during the growing season (see next step), how to continue with the PI (technical/agronomic training) workshops, what kind of trainings are needed for the next season, etc. Given that learning is an important goal in the PIP approach, experience shows that PIs will rapidly acquire new knowledge, and that workshops remain necessary to discuss about experiences.

2.2.6 Phase 2, step 6 – Implementing PIP activities in first growing season

As soon as the PIPs of the PIs are ready, they can start implementing the first activities! Most activities can be implemented without any technical assistance, given that these are often a change in management or practices that are already known to others, and shared in the PI group. However, for new practices or for improving existing farming practices, technical trainings can be given by the staff (in the Burundian case the same PIP assistants that facilitated the PIP workshops for the PIs). Particularly in this first growing season it is crucial that the PIs receive training about agricultural measures that can directly be implemented, e.g. the use of improved seeds or fertilizers, and better crop management techniques. Implementing these improved technologies will lead to 'quick wins', i.e. positive change created in the short term. Such quick wins are very important for the intrinsic motivation of the farmers and will stimulate them to proceed with the implementation of their plan.

The choice of the exact topics of these workshops depends on the needs of the PIs and are generally defined and agreed on during the last PI workshop in step 5. Hence, trainings are given on-demand only, although certain topics – depending on the time of the year and the growing season – can also be suggested by the staff or project. These trainings must be both theoretical and practical and use a participatory approach in which local knowledge is highly valued. During the trainings, discussions between PIs are very important, since this exchange of information can enrich the knowledge provided in the trainings with specific knowledge about what works best in the local context. Experience shows that farmers trust one another and inspire each other when they talk about good practices they have experienced/seen. If needed,

trainings can be given by external experts in specific topics or skills, but as trust is crucial, preferably the PIP assistant gives the trainings.

With the PIP approach being focused on land management, it is suggested that the first trainings provide and reinforce the message on the aspects related to soil conservation (soil restoration, soil fertility management, etc.) in order to raise more awareness on the importance of healthy land. Needless to say that - if needed - also the project staff should receive this training, in order to have an adequate level of knowledge. It is important to note that **every group to be trained is different**, having their own ideas and needs, but it is suggested to perform technical trainings at least in the following categories: land management; crop management; livestock; other (off-farm) activities.

Land management

The main collective activities on land management are scheduled in the dry season, enabling the farmers to directly put in practice what is learned, preferably in group work. However, training on land conservation practices and soil fertility management (mulching, continuous ridges, contour-lines, trenches, stone and/or soil bunds, intercropping, green fertilizers, liming etc.) should be done soon after PIP creation in order to raise awareness on the importance of land management before doing any other improvement. A training given in land management can for example entail the following:

- ✓ Recycling organic waste (avoid burning, make compost, utilising farm manure);
- ✓ Sustainable / better crop rotations
- ✓ Liming of acid soils / soil nutrient issues
- ✓ Soil coverage (green manure, cover crops, mulch)
- ✓ Agroforestry;
- ✓ Erosion control measures;
- ✓ Other Integrated Soil fertility Management practices



Use of mucuna as green manure



Use of mulch in a banana-vegetable garden



Defining the contour line of a slope with the A-frame

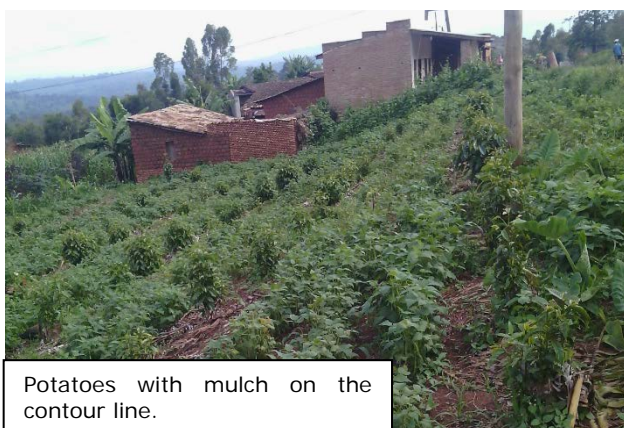


Women busy in digging a trench on the contour line to capture water

Crop management

Trainings on crop management are best scheduled according to the growing seasons. Depending on the type and content of the training, either before, during or after the crops are planted in the field. During the trainings on crop management the following topics can be discussed:

- ✓ Importance of growing particular crops;
- ✓ Agro-ecological preferences;
- ✓ Cultivation techniques e.g. choice of soil, plant density, crop rotations, seed/planting material;
- ✓ Sowing/planting techniques; nurseries for vegetables and trees;
- ✓ Organic and mineral fertilization;
- ✓ Crop maintenance (e.g. weeding, hoeing, mulching, irrigation, pest & disease management, etc.);
- ✓ Grafting for fruits
- ✓ Harvest and storage & conservation mechanisms.



Potatoes with mulch on the contour line.



Bean management with some innovative practices.

Livestock

Trainings are provided on livestock rearing and the importance of diversifying the type of livestock. As part of this training module, the following topics can be discussed:

- ✓ Breeding techniques;
- ✓ Animal feeding/watering;
- ✓ Animal reproduction;
- ✓ Hygiene and health;
- ✓ Differences between races regarding performance and behaviour.

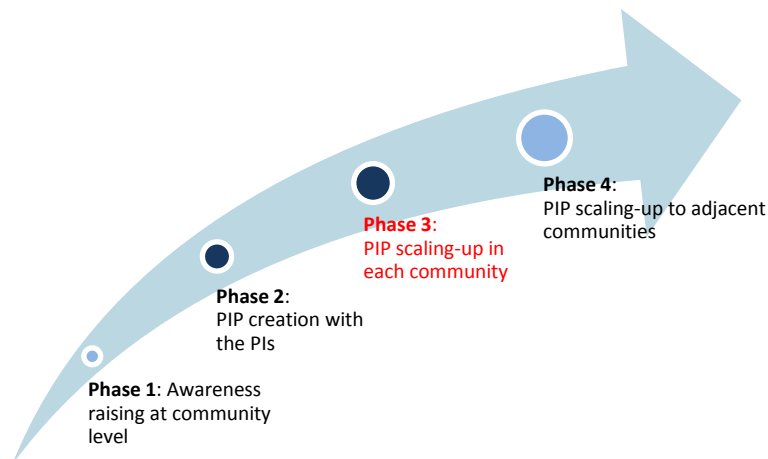


A pig stable (left) and cow stable (right) with downstream the pit ready for compost production.

2.3 Phase 3 – PIP scaling-up in each community

The following phase of the PIP approach is where a lot of action takes place to scale-up PIP towards community level: it starts by training the PIs to become Farmer Trainers, and then focuses on scaling-up towards community level by means of the **PIP competitions**; hence, spreading the PIP approach from the PIs to groups of farmers, and then to community level. This Phase 3 normally starts after a first growing season (Phase 2, step 6)

in which the PIs have already implemented some of their PIP activities as foreseen in the action plan. As such, they have something to show on their field, they have more experience with PIP, and they have received more training, thus feeling more self-confident to start training other farmers in the PIP competitions.



The PIP competitions are central in this Phase 3. These should not be considered as a real “competition”, but rather as a capacity building activity and a means to reach many farmers in a short period of time, aiming to trigger their motivation to invest in their farm. No incentives are therefore given during and after the PIP competitions, achieving as such the following five objectives:

1. To **transfer the PIP vision** and underlying ideas to a big number of farmers;
2. To **empower farmers** to invest in their farm (conscientisation – intrinsic motivation);
3. To **train farmers in PIP** and how to make a PIP themselves (the steps of PIP creation);
4. To **stimulate collaboration** and group work (social cohesion) among farmers;
5. To **scale-up integrated farm management** in a fast and sustainable way (ownership!).

In order to scale-up towards the whole community (or village), two competitions are generally needed: a first PIP competition, where only the PIs train the so-called 2nd generation PIP farmers, and a second PIP competition where both PIs and some of the 2nd generation PIP farmers train all other remaining farmers in the community (who become the so-called 3rd generation PIP farmers). The percentage of the population reached after the second PIP competition is variable. In the communities with household numbers inferior to 500 families, about 80% of the community members are generally reached after having organized two PIP competitions. However, in communities with more households, this percentage is generally lower, and PIP extension will continue either through a third PIP competition, or through spontaneous farmer-to-farmer training.

Once the first PIP competition is finished, a bigger critical mass of at least 200 PIP farmers is available in each community. With a group of these motivated farmers a “village vision” is developed, which is also part of this scaling-up phase. In total this Phase 3 takes about one year, including the time that PIP activities are implemented in one or more growing seasons. The sequence of activities is like this:

Phase 3: step-by-step

- | | |
|---|--|
| Step 1: Preparing the first PIP competition | - 1 month |
| Step 2: Undertaking the first PIP competition | - 2 months (+ 3-4 months PIP implementation) |
| Step 3: Village vision development | - starts here, is a continuing process |
| Step 4: Preparing the second PIP competition | - 1 month |
| Step 5: Undertaking the second PIP competition | - 2 months (+ 3-4 months PIP implementation) |

2.3.1 Phase 3, step 1 – Preparing the first PIP competition

The preparation of the first PIP competition should start when the implementation of PIP activities in Phase 2 (during the first growing season) is still on-going. Hence, there might be some overlap between activities in both phases, depending on the circumstances and the length of the growing season(s); however, crucial is that a first PIP competition should be undertaken when PIs have gained some experience with integrated farm planning and management, and can show first results on their fields. As explained above, being able to transfer this motivation, vision and first experiences is key in the PIP approach!

Selection of PIP trainers among the PIs

Not all PIs will have the same training and knowledge transfer capacities: some are good, others are more or less good, and others are weak. Some might also have other reasons for not being or feeling able to train other farmers. Of course, as mentioned under Phase 2, at an earlier stage the PIs have already been selected based on (among others) their willingness and ability to train others. This Phase 3 therefore starts with the confirmation of those PIs who are actually going to train others during the first PIP competition. Those PIs who are really not willing or confident enough to train, can be given another role during the PIP competition, e.g. they can assist the others to learn and gain more confidence. However, also these weaker PIs should be motivated to join the Training-of-Trainers workshops, which would probably still change their opinion and strengthen their self-confidence to train others. For a good PIP competition more or less 20 PIP trainers is a good number to start with in a community.

This selection of PIP trainers can be done in any of the PI workshops towards the end of the first growing season; hence, when PIs are still implementing their first PIP activities (thus overlapping with Phase 2).

Training-of-Trainers workshop

The PIs who will become the PIP trainers in the first PIP competition have to participate in the Training-of-Trainers (ToT) workshop organized by the project. This workshop lasts 2 full days, and builds the training capacity of the PIs and their attitude to motivate the active participation of participants during the trainings. Furthermore, during this training the PIs learn how to set-up, organize and manage a training session. But most important is that the ToT provides a rehearsal (repetition, with practical exercises) of the specific step-by-step activities that the PIP trainers will go through during the PIP training, including the use of the PIP tools (e.g. the PIP Image box) and how to explain the different steps of PIP creation.

A specific **Farmer-to-Farmer training module** has been made for this training (provided in a separate document). The module presents a timely guideline to facilitators for providing a training to the PIs in the Farmer-to-Farmer training methodology, including theories, simulation exercises and an action plan for the competition. This will equip the PIP trainers with skills before they start training the other farmers. The module explains in detail the key principles for informal training which are recommended for adult people like farmers, i.e. how to increase participants' motivation, how to stimulate an efficient participation for good mutual learning, as well as the step-by-step methodology of organizing a farmer training session in general.

More specifically, on the first day the PIs learn the more theoretical aspects on how to train other farmers, and on the second day they do a lot of practicing in small groups. In this way their skills in passing on the message, is strengthened: they repeat the messages, the content and the different steps of the PIP creation themselves. Practicing is done through role plays to permit others to listen and provide feedback, with each PI getting the opportunity to actually practice as a Farmer-to-Farmer (FtF) Trainer. Hence, the objective is that by the end of the training every PIP trainer feels confident to give the training!

Finally, during these workshops with the PIs the set-up of the competition is discussed in detail with them. It must be completely clear for each of them how the competition is done: when it starts and finishes, what they have to do, and how the results will be evaluated. One important aspect is to discuss the rewards

for participating in the competition: a small reward which can be shared, but which by no means will be considered as an incentive for the participants!

This Training-of-Trainers workshop can be given any time towards the end of the first growing season, at any convenient moment for the PIs, when first results are also visible on the farming fields!

Open Day

The Open Day is organized to make all other farmers familiar with the PIP approach and with the first results of the PIs, as such stimulating them to participate in the first PIP competition. Therefore it is recommended to plan the Open Day when the PIs have something to show on their farms: the planning, some new practices, and the integration of practices. As much community members as possible should be invited to this Open Day, which should also be announced on time and at a convenient day for everyone.

This day starts with an official ceremony with local authorities and the community: local governmental institutions (e.g. the extension service) and the administrative services are also invited to participate in order to raise awareness among them of the benefits of the PIP approach, and to get their support for future activities. Not any Open Day is the same, and the PIs have to decide how the exact agenda looks like, but crucial of course is that the PIP approach is very-well explained and promoted via posters and other materials (e.g. the PIP image box) and by means of testimonies. Hence, some of the PIs can explain the advantages and benefits of the PIP approach through sketches, dances, songs, and presentations; this raises interest of all other the community members, who will become curious to know more about this new approach which has already changed the mentality of the PIs.

How to make such official ceremonies a success

The official ceremonies and the home/field visits are all crucial to inspire the farmers. In order to make sure that the community members really participate in the home/field visits, it is suggested from the experiences that the official ceremonies should be as short as possible, so that the Open Day (official part + field visits) may be finished in the early afternoon. The home/field visits should be carried out by the PIs in all their homes, but for a visit by the authorities / officials preferably the nearest or a good accessible PI home and site should be chosen.

Crucial on this Open Day is that the community is invited to visit the PIs at their homes where they show and explain their PIPs, to teach the basics about a PIP and tell what they have done and achieved so far. This is important to inspire other farmers to participate in the first PIP competition. In all the messages during the Open Day it is recommended to insist on the importance of planning & vision (the PIP itself) which is essential in the approach, to make all villagers understand that the PIP is not only about the techniques but rather about motivation and collaboration towards achieving the vision.

Choosing farmers to be trained: the 2nd generation PIP farmers

After the Open Day, each of the PIs will form a training group for the first PIP competition, consisting ideally of around 8 to max 15 fellow farmers they want to train, and who want to be trained. In general, the group members are selected by the PI on the basis of already existing friendships, kinships or neighbourhood. This group of farmers being trained by PIs is referred to as 2nd generation PIP farmers.

Once the groups are formed (with each PI in the lead of one group), the required materials for the competition are distributed among these PIs: the leaflet or other tools that explain the PIP, enough paper (preferably A3 format) and drawing material for each of the group members, allowing them to first make a draft and later a clean version of the PIP with the whole household.

Generally, just before the start of the first PIP competition, the group of PIs will join again to present a list of the members of each group that will be trained by a PI (the 2nd generation PIP farmers) and they discuss the last details of the PIP competition among each other. Then the first PIP competition can start!

2.3.2 Phase 3, step 2 – Undertaking the first PIP competition

Overview of the first PIP competition

The first PIP competition covers around 6-8 weeks, preferably done in a period when labour demand for agricultural practices is low, so training groups can dedicate sufficient time to the workshops with each of the PIs. The sequence and content of the workshops is basically the same as for the PIP trainings with the PI groups in Phase 2 (Chapter 2.2), but it is up to each PI to decide how much time will be dedicated to each of the steps. Also concerning the exact planning: it is to each group to decide when the group work is done, but it should be stimulated and stressed that they start as early as possible with their trainings, so they can finish in time (well ahead of the next growing season, in which PIP activities can be implemented by the new 2nd generation PIP farmers). The planning we used for the first PIP competition in Burundi was as follows:

Week 1: Discuss and brainstorm about problems and solutions with the group

Week 2: Explain and discuss about the PIP approach

Week 3: Train on how to make a PIP (PIP creation steps)

Week 4: The participants make the PIP at their homes

Week 5: Discuss and exchange about the PIPs, then go home for improvements

Week 6: Selection of the best PIP in each group

Week 7: Evaluation process in each community

Week 8: Graduation Day

In the ideal situation, the workshops with each group are carried out in the house of one of the participants, and the family members of this farmer will also attend the workshop. Discussions are of course very important within each group, and the PI should stimulate discussions and exchange of experiences whenever possible. Furthermore, because the trained group will usually be a “group of friends”, most of the group members live in the neighbourhood, which make visits to the fields of the PI very easy and useful. Here participants can observe the effects of integrated farm management, and become aware and motivated to do similar things. As such, the trainings empower farmers to show that with a plan they can steer their own success.

As mentioned before, next to learning how to create a PIP, an additional objective of the PIP competition is to stimulate collaboration and group work (social cohesion) as a basis for future collective action. This is mainly achieved by workshops and exchanges during the PIP competition, where participants can enrich the PIPs of their fellow farmers during the group process. Next to that, these groups can also become the basis for future group work, and within each PIP the participants can plan for some collective activities.

Monitoring of the first PIP competition

The implementing organisation or project should closely monitor how the competition is developing, although it is important not to interfere too much: the intention is that the PIs perform themselves without external support (to guarantee the sustainability of the process). Usually this implies that project staff will visit some of the PIs and their groups on an informal basis to observe how they are doing, especially those PIs who might need some support.

Halfway the first PIP competition, a meeting should be organised with all PIs at community level to discuss the progress made, the challenges so far and how to solve them. This is an occasion for the PIs to exchange solutions to possible problems that might occur during the competition, and motivate one another. Also some further monitoring activities can be determined during this meeting, according to the observations made by the PIs. When the PIs are doing well and are quite autonomous to train and collaborate, there is no need for the project to interfere so much. However, in case of problems, this is the moment to solve them and support the PIs.

Some suggestions made by the PIs in Burundi during the monitoring meetings

- Some PIs suggested to collaborate more and attend each other's trainings for mutual support and learning;
- In case of illiterate farmers in the training group that had difficulties to follow the trainings, the PIs suggested to allow other literate members of a household (husband or wife) or colleague PIs to join the trainings;
- The PIs who had finished earlier to successfully train their groups, offered to accompany and help the other PIs in their trainings and as such speed-up the process.

Evaluation of the first PIP competition

The evaluation and assessment of the PIPs made during the first competition is done in two phases:

1. When the trainings within a group have finalized and all participants have created a PIP, each group chooses the best PIP in the group. This is – similar to all other training activities – another important learning moment, as the participants will discuss about each of the PIPs and why one is better than the other. The most serious participants with better PIPs (more integrated practices, better quality drawing) are usually also the ones who can better explain these aspects of a PIP. Finally, after all discussions have finalized, each group chooses the best PIP by taking into account the evaluation criteria as presented in Table 3: this winning PIP farmer represents the group when the best PIPs are chosen at community level!
2. In the following week, in a meeting at community level with all the PIs and these best 2nd generation PIP farmers, the latter present their “best PIPs”, and from these the best three to five are chosen. These are chosen by a committee based on the same evaluation criteria presented in Table 3. The committee members can be project staff, village leaders, or PIs of different sub-communities. Again, this is a great learning moment for all participants, because there will be discussion about the PIPs, why some are different; and which ones are better and why. The 3 to 5 best PIPs are chosen and among the winner, i.e. the best 2nd generation PIP in the community. In order to avoid any partiality, a committee member never evaluates a PIP farmer of his own group.

Table 3. Evaluation criteria of a good PIP for the first competition.

#	Criteria
1	Quality of the PIP: how well it expresses Integrated Farm Management, the richness of the PIP, the innovations suggested, how these are related to each other (integrated).
2	Quality of the drawing: how the PIP looks like, if it is drawn nicely, if it is easy to understand what is expressed, the colours used, the symbols, etc.
3	The oral explanation of the PIP: how the PIP is explained in 5 minutes, the enthusiasm of the farmer, the clarity of the explanation, vision of the farmer, how he/she answers questions from the audience

Graduation Day

The Graduation Day in each community/village is the conclusion of the first PIP competition and the occasion to reward all the participants for their efforts. Very important to emphasize here once again is that a reward is not the same as an incentive! Incentives or prices are used to stimulate people to do something that YOU want them to do, and therefore an incentive or price drastically reduces the intrinsic motivation of a person. However, a reward is like a compensation for an effort of someone, and it should be small enough in order not to be considered only an incentive!

The Graduation Day is organized at community/village level and allows all farmers to participate and celebrate the progress made in PIP creation. Because it is in the neighbourhood, the PIs, the 2nd generation PIP farmers and other community members are invited to come and participate in the ceremonies; which will be stimulus to join the next 2nd PIP competition. To celebrate this day, the PIs and their groups can prepare for example sketches, songs, poems and testimonies (or whatever is suitable for their local culture) to explain about the PIP approach and what they have learned so far.

During this day, the 3 to 5 best 2nd generation PIP farmers can present their PIPs in front of the participating community members (Figure 8), and will receive a reward; something that can be shared in their group, such as a bag of improved seeds, a wheelbarrow, etc.). The winner of the first PIP competition gets an extra reward (e.g. improved onion seeds or other kind of seeds that can be shared with the other members of the group). When all rewards have been given, the PIs receive their PIP-trainer certificate.



Figure 7. Presentation of the PIPs in front of other community members.

2.3.3 Phase 3, step 3 - Village vision development

The vision transferred from the PIs to the 2nd generation PIP farmers (during the first PIP competition) triggers intrinsic motivation and an increased awareness, especially on integrated farm management and sustainable land management. This stimulates the need for collaboration, as a foundation for scaling-up from the individual visions to collective and community/village visions.

Developing a village vision mobilizes the community members to adhere to collective actions towards a common destiny that leads them to sustainable development. This strengthens the individual (PIP) visions and makes them more sustainable. Elaboration of the village vision after the first PIP competition is crucial, because at this step there is a good foundation of intrinsically motivated farmers in the community, who are able to motivate the other community members. Experiences have shown that the elaboration of the village vision during that period stimulates the rest of the community to participate in the second PIP competition and to undertake other collective actions.

In Burundi the village vision was developed in several workshops, both at district level and community level, with representatives of different categories of people, in order to trigger exchange of ideas and visions. The advantage to start at district level is that it is easier to commit district level participants to join, and it provides a good basis for workshops at community level, to further elaborate the village vision through community assemblies. Furthermore, the village visions can serve in the elaboration of strategic development plans at district level!

Workshops at district level

Given that workshops cannot be too big because of too many participants, it is recommended to start with one workshop for 2-3 communities from the district. In Burundi the project worked with two communities in each district; hence representatives and PIs from both communities were invited. Furthermore, some representatives from the district's technical and administrative services participated to provide advice and explain about district / governmental strategies when necessary. Experiences show that two workshops are needed at district level: one day for discussing and drawing the village vision, and one day for planning concrete activities to work towards the village vision.

Participants in workshops at district level (Example from Burundi)

- All 20 PIs per community (so 40 in total from the 2 communities)
- All members from the CDC of each community (the Committee for Community Development, i.e. Village Board)
- 4 chiefs / representatives from sub-villages
- 2-3 local agronomist (extension workers) from the communities
- From the District: 1 administrator, 1 agronomist, 1 veterinarian, 1 staff in charge of environment (communal forestry), 2 advisors (1 economic and 1 socio-cultural advisor), 1 health promoter

✓ **First day workshop: drawing the village vision**

Group work is facilitated in order to design a concerted vision from the economic, environmental and social perspective for each of the participating communities. The participants are therefore divided in sub-groups for each issue (social, environmental or economic), while the other participants join these groups according to their interest or where they are needed most to provide advices in their domain of competencies. The following topics are suggested for this group work:

- **Diagnosis of the current situation:** With a focus on strengths, weaknesses and shared concerns in the community, especially related to the three specific issues that are discussed in each of the groups.
- **Discuss on the future consequences:** With a focus on causes/effects relations and a discussion on the different consequences if the current tendencies continue. Different scenarios can be exchanged and awareness is raised about where urgent action is needed.
- **First plenary:** Each group presents their outcomes, and discussions with the other groups will contribute to raise more awareness and build a foundation for the next discussions.
- **Discuss on the ideal future situation:** Focus on the change in each community for the 3-5 coming years and actions that need to be undertaken. A draft of the desired (realistic) future is discussed and drawn on a paper (by choosing some people who are good at drawing), and then discussed to agree on a good picture of the community that they aspire.
- **Second plenary:** The different groups present the drawing of the desired future of their community, as well as their aspirations for the coming 3-5 years. The visions of the different groups in each community are compared and discussed within the whole group of participants. The participants will convene on a vision which mostly meets the common concerns of the different stakeholders, both economically, environmentally and socially, for the interest of the current and the future generations. This is the first draft of the village vision.

✓ **Second day workshop to establish the community action plan**

In order to discuss and plan actions which need to be undertaken in order to reach the established vision in the previous workshop, a second workshop is organized with the same stakeholders. Groups come together again to agree on required actions to reach the village vision and what is needed from the different stakeholders. These actions are prioritized, clarifying the responsibilities of different stakeholders.

This starts by reminding one another on the changes needed in the community (output first workshop), after which a list is made of activities to be undertaken in order to achieve these changes related to the village vision. For each action, responsibilities of the participants are clarified, followed by an action plan: objectives/change, activities, who is responsible, when and how the progress will be monitored. Concerning monitoring, a committee is participatory established at the end of the workshop, composed by leaders from each community (or sub-community). A tool for monitoring and evaluation of progress was elaborated in the Burundi project and is available upon request: such a tool should be further elaborated and discussed with each community in order to enable local stakeholders to perform M&E themselves.

Workshop at community level

After the district level workshops, a community assembly is organized to present the first draft of the village vision and the action plans, in order to enrich these with ideas expressed by the community members. If there is not a fixed place where assemblies are held, an option is to organize it in a place where participants have a good overview of the community or where natural resources degradation is well visible (e.g. places affected by land degradation). This helps to raise awareness and even jointly visit these places, and contributes to developing village visions that take good natural resource management into account. To enhance ownership, participation of as many as possible people is very important; when the crowd is big, loudspeakers can be circulated. The facilitation can be jointly done by the project staff and the leaders that participated in the district workshops.

During this assembly, a group of around 3 farmers is identified to improve the drawing, most probably the same people who have drawn the village vision during the previous workshop. These people are given flip chart papers and drawing material, and try to capture in the drawing the key ideas expressed by the participants. At the end of the meeting, the final draft drawing is presented to the community. This drawing is further improved (Figure 9), laminated and placed in a public place where it can remind the community members on their vision. Note that in order to avoid overloading this final village vision, some issues are not drawn (e.g. no more smoke caused by burning) or simply cannot be drawn (e.g. less conflicts).

Key issues expressed in the village visions

Economic: Access to improved seeds and good quality inputs in agriculture and livestock; Good and safe storage conditions; Improved production of organic fertilizers to restore the soil fertility; Improved farming methods on the marshland; Kitchen gardens for good nutrition and health.

Environment: abolish the burning of crop residues; all the land is protected with contour-lines on sloping land (with vegetation, agroforestry and forestry trees); vegetation borders on all the plot borders; plantations along the roads; wells are well managed and provide good quality drinking water.

Social: more security, less conflicts on land issues, no more passiveness, legal marriage, family planning, social collaboration



Figure 8. Village vision drawn by farmers in a village in Burundi

2.3.4 Phase 3, step 4 – Preparing the second PIP competition

After the first PIP competition, each community counts (more than) 20 PIs and (more than) 200 second generation PIP farmers. The next challenge is to train all remaining farmers in each community in PIP creation; this is done in a second PIP competition. In communities with ≤ 500 households, the majority can be reached easily in this second PIP competition, and – if adjacent communities are situated nearby like in Burundi – some PIP trainers might even start training farmers from these communities during this second PIP competition. In fact, it should be stimulated to start training some of the farmers in the adjacent communities, given that they will become a bridge for further extension in these communities. All newly trained farmers become the 3rd generation PIP farmers, and at this stage in the PIP approach usually these farmers are very motivated because they have already heard about the effect of the PIP approach.

The preparations for this PIP competition can start as soon as the first one is finished, but ideally the village vision is elaborated in between both competitions as explained in 2.3.3. Given that in this competition not only the PIs will be trainers, but also 2nd generation PIP farmers can train other farmers, the following preparatory activities are very important for the smooth roll-out of this competition.

Community sensitization

A new meeting at community level is organized (by the staff, but primarily also by the PIs) for awareness raising about the progress made in the PIP approach and in PIP implementation by the PIs, and to inform that there comes a new opportunity for all remaining farmers to also learn how to create a PIP. During this meeting, not only the PIs but also some 2nd generation PIP farmers get the opportunity to testify about the benefits they got from the PIP approach, through sketches, songs and testimonies. Pictures showing the PIPs and some achievements are illustrated in the different places for awareness raising. Here also, as in all the sensitizing messages, it is recommended to emphasize the concepts of vision and planning which are essential in the PIP approach.

Coordination with the PIs

In a meeting with the PIs, an action plan is elaborated for the second PIP competition, with the main activities and the schedule. The following activities should be discussed and planned:

- Identification of new potential PIP trainers and the 3rd generation PIP farmers to be trained;
- How to distribute the material (to draw the PIPs in the second competition);
- Start and duration of the second PIP competition;
- Monitoring of the second PIP competition;
- Evaluation of the second PIP competition.

In practice, not all the 2nd generation PIP farmers will actually train other new farmers: some will train several new farmers, others won't train anybody. These new PIP trainers are selected based on the criteria of willingness and ability to train others. Each PI therefore provides a list of these new PIP trainers of his/her respective group. In order to facilitate the monitoring of the number of new farmers trained during the second PIP competition, a data collection sheet is given to each PI, showing 1) the names of the new PIP trainers in the group; and 2) the names of the farmers (3rd generation) already identified to be trained during the second PIP competition. On this sheet, eventually all names of farmers effectively trained at the end of the competition are written with their phone number.

Because of the generally large number of new 2nd generation farmers that want to become a PIP trainer, a refreshment training is given to the PIs about the Training-of-Trainer (ToT) workshop, which enables them to train the new PIP trainers in their specific groups. This saves the project a lot of time and effort, and is much more sustainable: farmer-to-farmer training works very well! The training provided is the same as the one the PIs received before they started the first PIP competition. During this refreshment training it is important that the PIs can share their experiences, especially on how to deal with the different behaviours of farmers in a training session.

Training of new PIP trainers (by the PIs)

After their refreshment training, the PIs proceed with the trainings of the new PIP trainers in their respective groups. The training is organized under the facilitation of the staff for orientation and guidance. The same sequence is followed also in the ToT workshop as described under 2.3.1. Collaboration among the PIs is encouraged during these trainings, meaning that 2-3 PIs can train new PIP trainers together in a same session, which is particularly beneficial for those PIs who are still a bit unsure how to explain the details of the farmer-to-farmer methodology. The better PIs, the best PIP trainers, can therefore take the lead and work together with the weaker ones to strengthen their confidence.

Important to remember is that this second PIP competition is again a competition among the 20 original groups of the PIs! Hence, the PIs, the project's most close allies and trusted persons, are again in charge and will monitor the number of new farmers trained by themselves and by their group members (i.e. the new PIP trainers among the 2nd generation PIP farmers).

2.3.5 Phase 3, step 5 – Undertaking the second PIP competition

Distribution of material

Materials for the development and construction of the new PIPs are similar as in the first PIP competition: PIPs are drawn on sheets of A3-paper (double A4), which can be folded: on the left-hand side the current farm situation is drawn and on the right-hand side the dream situation. Pens of different colours should be available for each of the new PIP farmers that are to be trained, so that they can draw their PIP as nicely as possible (e.g. a set of green, blue, red and black).

Furthermore, the PIP leaflets are given to the new PIP farmers by their trainers (either a PI or 2nd generation PIP farmer) in which they can read/see how to make their PIP. Finally, the PIP image box that each PI still has in his/her house can be picked-up and used by each PIP trainer whenever they give a training; hence, good coordination by the PI is necessary!

Running the second PIP competition

The second PIP competition follows the same week-planning as the first competition: from week 1 where the problems are discussed with the group, till week 6 where the final PIP is completed and the best one selected by each PIP trainer. The training groups are usually smaller than in the first PIP competition (e.g. about 3 to 8 farmers per PIP trainer) due to the high number of trainers, and therefore some training groups join together and are trained by several trainers together. This is very good, because as such the new PIP trainers learn from each other, and can more easily be supported by one of the PIs. The role of the PIs remains thus very important during this competition: they supervise the work of "their" 2nd generation PIP trainers, and they keep track of the number of farmers that are trained by these new PIP trainers.

Monitoring of the competition

It is strongly recommended that during this second PIP competition the project organizes regular meetings with the group of PIs in each community, to discuss about the progress of the competition and the number of 3rd generation farmers that are being trained. Such meetings can for instance be combined with other technical workshops that the project wants to give to the PIs, as these will continue in this phase (e.g. on agronomical practices). In each meeting it should be emphasized that making high quality PIPs is very important: it is not only the quantity that counts in the competition, but foremost the quality of the new PIPs, giving emphasis to the main objective of these competitions, namely *awareness raising about the importance of Integrated Farm Management*.

Besides, at least one additional meeting should be organised with all the PIP trainers in this second PIP competition. Given the generally high number of PIP trainers, these meetings are organized at sub-village

level, or in a sector of the community close to the homesteads of the trainers. This allows to discuss with smaller groups of PIP trainers (especially the new ones) about the progress made, the challenges met and possible solutions. These exchanges are of course highly participatory to optimize learning!

Evaluation

The evaluation of the second PIP competition covers the following steps:

- ✓ Once the competition is finished, each PI calls the new trainers of his/her group together to check the final total number of 3rd generation PIP farmers trained (based on the distributed monitoring sheet). During this meeting the final list is made of trained farmers. However, their names are only written down as “being trained” once the PI has actually seen the PIP (drawing and action plan) of the trained farmer. This is the quality check within each group by the PI!
- ✓ In the same group meeting with each PI, the best 3rd generation PIP farmer is chosen. This implies that each PIP trainer of the group can suggest his/her best 3rd generation PIP farmer, who will then present his/her PIP in front of the whole group. Next, among these candidates the best one is chosen; the one who represents the group in the final evaluation of this second PIP competition.

This final evaluation takes place in a PI meeting at community level, following the end of the competition, where all PIs come together and bring with them their best 3rd generation PIP farmer with his/her PIP. In this meeting, first the total number of 3rd generation PIP farmers that have been trained is written down, with their names and the name of their trainer. Given that the quality check has already been done by each of the PIs, the total number of new PIPs in the community is reliable. Next, in the same meeting, each of the best 3rd generation PIP farmers present their PIP and the 3-5 best ones are chosen, with one of them the winner. The criteria for their selection are the same as for the first PIP competition: richness of the PIP, quality of the drawing, and clear explanation of the PIP. The evaluation is performed by a committee from the different sub-communities or representatives from different groups in the community.

Furthermore, the group that trained most 3rd generation PIP farmers is announced. During the first PIP competition each PIP trainer trained 10 farmers, but during this second PIP competition this number can vary tremendously (from 1 to 20 in Burundi). Hence, both quality (the best PIP) and quantity (most farmers trained) are evaluated!

Promotion Day

In order to facilitate the participation of the whole community in awareness raising on the progress made and on the next steps, a Promotion Day will be organized at community level. This is the opportunity where the 3-5 best recently trained 3rd generation PIP farmers in the community will present their PIPs. Given that some adjacent communities are also reached during the second PIP competition, participants from these adjacent communities can join the Promotion Day. This Promotion Day is however organized on purpose at community level to strengthen local ownership of PIP, village vision, follow-up and collaboration in PIP implementation. Further scaling-up of PIP creation to other neighbouring communities (within the same province and beyond) takes place in a next phase.

The Promotion Day will again be a day of festivities, because now the communities are promoted for being PIP communities! On this day, it is important to stress on the consolidation / continuation of collective activities such as those related to the village vision, exchanges visits, and PIP implementation.

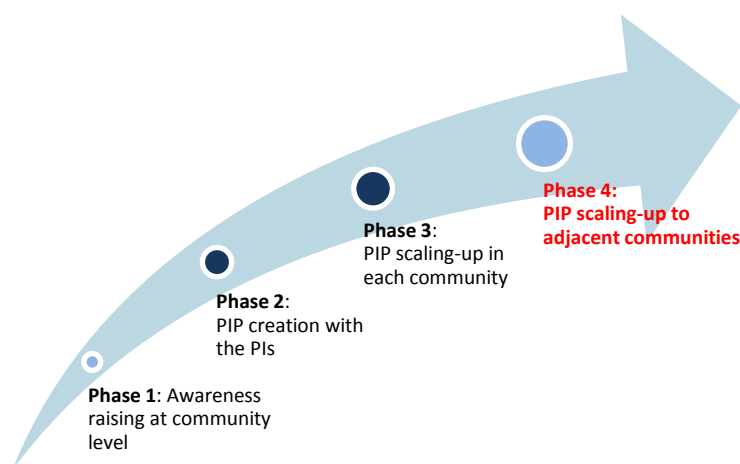
Rewards

Rewards are given again to all participants, however, these are smaller than in the first PIP competition for two reasons: first of all because there are too many participants and trainers involved in this competition so that it becomes too expensive; and secondly because we want to avoid that people become used to getting rewards. The suggestion is to buy vegetable seeds or other kind of seeds for all the participants which can be distributed among the PIP farmers in each of the groups.

2.4 Phase 4 – PIP scaling-up to adjacent communities

During the second PIP competition in Phase 3, in most cases some adjacent communities are already reached and now count with some trained PIP farmers. These new PIP farmers in the adjacent communities can become a bridge for further scaling-up of PIP creation beyond the original communities. However, only in adjacent communities with sufficient new PIP farmers, scaling-up can actually start soon. This is a decision that the project should make, based on staff capacity, project objectives, the geographical conditions (e.g. accessibility) and of course the socio-economic context in each community (ref. the aspects of a solid foundation as mentioned in Table 1).

In adjacent communities where a high number of farmers was reached after the second PIP competition (e.g. more than 100 farmers) the start of PIP work will be easy: we suggest to select a number of 20-30 of them according to clear criteria, refresh their knowledge and train them in ToT methodology to become the leaders of the PIP



approach in their community (farmer trainers like the PIs). However, in other communities with less PIP farmers, we suggest that firstly some extra farmers should be trained in PIP creation by the existing PIP farmers, in order to build a good foundation for scaling-up.

This Phase 4 describes how to continue working with these PIP farmers in the new communities, and how to ignite also there the “PIP fever” to cover the majority of farmer families in these communities. This chapter also describes the role of the extension service in this process: their active participation in this scaling-up phase is essential to embed the PIP approach within the extension service and spread the PIP fever even further towards ever more communities. This phase comprises the following five steps, which are basically the same as the scaling-up process described in Phase 3, but with a more flexible timeline which depends on the conditions in each community:

Phase 4 step-by-step

Step 1: Training of extension staff	- 3 days
Step 2: Preparing PIP trainers in adjacent communities	- about 1-2 months in total
Step 3: Organization of the Information Day	- 1 day per community + time for organizing
Step 4: First PIP competition	- 2-4 months, followed by implementation
Step 5: Second PIP competition	- 2-4 months, followed by implementation

2.4.1 Phase 4, step 1 - Training of extension staff

In the previous phases of the PIP approach, the local extension staff should have been involved already in PIP activities (the intensity depends on the local context). Ideally they will have participated in the different sessions of awareness raising related to the PIP approach, in the elaboration of the village visions, in the facilitation of collective activities related to sustainable land management, in providing technical support to PIP farmers, etc. However, given that in the original communities, where the PIP approach has started,

the project or implementing organisation was still mainly in charge of the whole process, the active involvement of extension workers will in practice have been variable. Depending on the mind-set of a person, some will have been more dynamic (with intrinsic motivation to learn and join) than others. However, NOW, in the Phase 4, this is different, and given the scope of scaling-up activities and the fact that the project can no longer operate only with its own staff, the extension service becomes crucial; also in view of achieving sustainable impact and creating ownership of PIP within local institutions.

Given that the extension staff is thus not yet fully acquainted with all the PIP aspects in detail (e.g. their awareness of the importance of PIP-principles, drivers and habits, but also of the PIP-enablers at institutional level which are very important in this scaling-up phase!), an intensive training must be given as starter activity of this Phase 4. The main participants in this training is the field staff of the extension service (agronomists at community and district level), but of course also others can be invited if considered necessary. Based on the current PIP manual (hence explaining all the details of the different phases) they follow a 3-day training, which includes 2 days of theoretical and practical work, as well as a field visit of one day to one of the communities. After this training the extension staff should be ready to start their work for scaling-up the PIP approach to the adjacent communities!

2.4.2 Phase 4, step 2 - Preparing PIP trainers in adjacent communities

Selection of PIP trainers

Now that the extension staff is ready and motivated, the work in the adjacent communities can start. In the case of communities that already count with enough PIP farmers available (trained in the second PIP competition), a selection should be made to end-up with about 20-30 farmers who will become involved as PIP trainer in upscaling activities in their community. First, in each group the participatory definition of selection criteria is carried out, which are basically the same as for the selection criteria used previously for PI selection (see 2.1.2). Of course it is possible to have more than 30 farmers as PIP farmer in each community, but experience shows that 30 participants is already high for an effective workshop, so with more participants parallel sessions (and more trainers) should be organized which is more work and effort. Quality of the PIP trainers remains a crucial issue, as a good training of this group of first PIP trainers is essential for building a solid foundation for PIP extension.

From the group of 20-30 PIP trainers in each adjacent community, two are selected to become the so-called "intermediary farmers", who become the contact persons between the farmer trainers and the extension staff or facilitator. They will transmit information from the extension staff to the PIP farmers and vice-versa. These intermediary farmers are selected according to their leadership capacity and willingness to participate voluntary.

Training of the PIP trainers in the adjacent communities

At this stage, PIs from the original communities are very experienced in the PIP approach (usually even more than the extension staff), and can therefore be employed for training in the adjacent communities, to share their experiences with others, and encourage the new PIP trainers. As this is a "job of honour" for most PIs, and all are generally willing to do this, the best PIs are participatory selected in a PI meeting in each community. The selection is done according to criteria such as the level of their PIP implementation, the proficiency shown in the explanation of the PIP approach, and the dynamism shown in the farmer-to-farmer training in their own communities. How many PIs are selected depends on the need for their assistance in the adjacent communities.

All selected PIP trainers in the adjacent communities follow a refreshment training in the PIP approach, as well as in the methodology of Farmer-to-Farmer training. This training takes 3 days, follows the same sequence as described in previous sections, and is given by the extension staff and the selected PIs. Once the trainings have been given to these new PIP trainers, experience shows that sometimes other PIP farmers in the new communities will become enthusiastic to also train fellow farmers during the first PIP competition. Given that this is not a problem in this scaling-up phase, the freshly trained PIP trainers are

stimulated to train these other PIP farmers and in this way increase the number of PIP trainers that can be used during the first PIP competition. However, important to notice that of course also these other PIP farmers need to comply with the set criteria for becoming a PIP trainer.

Refreshment PIP training in the adjacent communities

These trainings take 3 days, with 1 day dedicated to the PIP approach and 1 day on Farmer-to-Farmer training practices (using the ToT module). In order to provide enough time for exercises or a field visit, the third day is needed. This will also give the opportunity to better discuss the lessons learnt and decide about the planning for the PIP competition: i.e. how to identify new farmers to train, collaboration between PIP trainers, how the competitions will be monitored, the support needed from the selected PIs, the duration of the competitions and how the competitions will be evaluated.

2.4.3 Phase 4, step 3 - Organization of the Information Day

The Information Day is the first day of awareness raising towards the community about the PIP approach and about PIP creation in the new communities (i.e. the PIP competition). During this day, the involvement of the extension staff is very important, as they have a crucial role in the scaling-up process in the new communities. Also representatives of administrative structures at province or district level will be invited, as well as local partners (NGOs) to be involved in future activities in the new communities. This is important, given that involving these representatives of administrative and technical structures from the start is essential for future further scaling-up and embedding the implementation of PIPs.

During the Information Day a clear explanation should be provided about the future outlook, and what can be expected from the project and the PIP approach. As this is the first “official” start of activities in the new communities, care should be taken not to raise false expectations. Furthermore, the selected PIP trainers will have the opportunity to present their PIPs and their achievements so far, and the PIs from the original intervention communities can be invited to explain what they have done and testify about achievements with PIP implementation on their farm and the impact of PIP (Figure 10).

This activity will be a first experience by the local people with the ideas behind the PIP approach, and stimulate them to start thinking about the future they want. Furthermore, the PIP trainers will prepare some sketches for this day which show the different components of a PIP. The Information Day will finalize with the announcement of the first PIP competition, emphasizing the role of the local PIP trainers and the extension staff in facilitating this activity.



Figure 9. Impressions from the Information Days performed in an adjacent community

2.4.4 Phase 4, step 4 - First PIP competition

Preparing the first PIP competition

According to the plan which will have been elaborated during the training of the PIP trainers, the first PIP competition will be among a certain number of participating groups per community, depending on the number of selected PIP trainers. These PIP competitions follow the same sequence of activities as previously described for the original intervention communities, but required time is more given that the monitoring work involves more communities. Materials for the PIP competition will be provided by the project. All PIPs made during these PIP competitions are drawn on A3 format, and this material is distributed directly to the PIP trainers according to a list of the expected number of farmers to be trained by each of them. Among the material, the PIP leaflets are provided to each farmer to be trained, and PIP trainers use the PIP image boxes during the farmer-to-farmer training. In most cases, given the small number of PIP image boxes available compared to the number of PIP trainers, they need to be multiplied so that at least 1 toolbox is available for 2 PIP trainers.

Monitoring the first PIP competition

Monitoring of the PIP competition is performed by the extension staff and intermediary farmers. Each PIP trainer provides a detailed plan, showing the days when the PIP trainings will take place. According to this planning, the extension staff reserves at least 2 days per week for monitoring of the PIP competitions, and visits some groups to have an idea how the competition is going. During the monitoring they take notes of the observations using a simplified monitoring tool which shows:

- The name of the PIP trainer;
- The number of group members,
- The performances of the group in the training

Additional workshops are organized with the PIP trainers during the competition, combined with other practical days about agricultural techniques that the extension staff provides (e.g. erosion measures, compost making, kitchen gardens, etc.). During these workshops, each PIP trainer has the opportunity to explain the progress made and the challenges met during the competition. The PIP trainers themselves are encouraged to discuss possible solutions to the exposed challenges, which generates more ownership in the PIP extension process. In these workshops, the PIs are invited to join and share their experiences. Hence, these workshops serve for capacity building as well as for monitoring the PIP competition.

Evaluation and PIP Day

After finalizing the competition, each PIP trainer presents a list of new farmers trained (the 4th generation PIP farmers!) to the intermediary farmers, plus the elected best PIP of the group. The intermediary farmers then verify the different PIPs, and present this during a first evaluation meeting with all PIP trainers, organized under the supervision of the extension staff. In that meeting, where the PIP trainers and the selected best new PIP farmers are present, the best PIPs are presented, and again the 3-5 best PIPs are chosen the winner. A committee consisting of PIP trainers of the community evaluates each presentation, based on the evaluation criteria of quality of the PIP (the PIP components, integration), level of own PIP understanding, quality of the drawing, and total number of farmers trained.

The role of PIs in scaling-up activities

Each PI involved to support the PIP competitions in the adjacent communities in Burundi, could supervise about 8-10 new PIP trainers. This included attending the (refresher) training sessions before the start of the PIP competition, and visits during the competition (3 groups could be visited in one day). In some occasions groups worked together (i.e. PIP trainings were given by 2 PIP trainers together to support each other), which facilitates the work of the PI. Next to these visits, the PIs also participated in the monitoring meeting. In the second PIP competitions in the adjacent communities PIs are no longer used. Rather, PIP trainers in the first PIP competition are then already more experienced and in charge of supervision, especially the intermediary farmers and some other more dynamic PIP farmers.

2.4.5 Phase 4, step 5 - Second PIP competition

The scaling up strategy presented here for the second PIP competition is based on the results of the few lessons learnt in Burundi, suggesting the following activities:

- ✓ Evaluation meeting with the extension staff
- ✓ Identification of new PIP trainers (among recently trained PIP farmers in the 1st PIP competition))
- ✓ Training of the new PIP trainers / Refreshment of the experienced PIP trainers;
- ✓ Meetings for awareness raising at community level
- ✓ Distribution of training material
- ✓ Launch, monitoring and evaluation of the second competition
- ✓ Second PIP Day in the adjacent community

Before starting the second PIP competition, an evaluation meeting is organized where the extension staff in collaboration with the PIP trainers evaluate the lessons learnt during the first competitions, and discuss the planning and strategy for the second PIP next competition. An important activity to be discussed here is the exchange visit to one of the original communities where the project started, and in which all PIP trainers can participate; especially those who are most eager to learn about innovations (see box below). Furthermore, also within each adjacent community exchange visits should be stimulated, like open days on which the most experienced PIP farmers show their progress; this is crucial for motivating all remainder farmers to join the second PIP competition.

The added value of exchange visits

In Burundi, a high number of new PIP farmers/trainers from the adjacent communities participated in exchange visits to original PIP communities just after the first PIP competition. This was very motivating for them, because they could observe innovations on farmers' fields, and the progress made with PIP implementation and integration on the farm. As a result, most of them started immediately after the exchange visit with the implementation of PIP activities on their own farm, sometimes even more rapidly than planned in their PIP. This was observed by their neighbours and increased their motivation to also start creating a PIP and join the second PIP competition.

Next, new PIP trainers are identified among the recently trained PIP farmers (the 4th generation) who are able and willing to get involved in this process. These new PIP trainers follow a one day refreshment training in PIP creation and ToT methodology, given by the extension staff and the most experienced PIP trainers in the adjacent community (especially those from the 3rd generation PIP farmers). Given the increasing distance from the original communities, it is hard for the original PIs to come and invest time, and it is recommended to give more responsibility to the 3rd and 4th generation PIP trainers who live in the adjacent communities. These trainings are basically the same as previous workshops, focusing on key elements such as changes in attitude and behaviour, how to organize a training session, how to motivate groups of farmers, and the step by step PIP training process including the "family tree".

Once done, the plan for the second PIP competition is discussed among all PIP trainers, and an agreement is reached how to move forward. This procedure is basically the same as described for the first competition. Sometimes, when awareness is still low in a community, the decision is taken to first do some awareness raising activities, such as sketches, an open day, or other activities to sensitize the community about the advantages of PIP creation. During such occasions the second PIP competition is announced, but this can also be done during an assembly or other occasion (in case no awareness raising meetings are organized).

The next steps follow what is described for the first PIP competition, with again an important role for the intermediary farmers to document all lists of groups of PIP trainers and new farmers trained in PIP. Based on this inventory a planning is made and material is distributed to the PIP trainers, including the PIP leaflets and the PIP image boxes, which are to be multiplied according to the increasing number of PIP trainers.

Finally, the second PIP competition is launched, monitored, evaluated, and closed with another Open Day, similar to the process followed for the first PIP competition. Of course this whole process can be repeated for further scaling-up to even more communities, expanding the PIP fever further and further!

Annex 1 Farmers' testimonies

- *In the PIP, I found a secret. I could not have performed what I have already done in such an integrated way if I had not drawn PIP and put it on the wall (Cleophas, Gitega).*
- *The PIP stimulated collaboration among us. Thanks to this collaboration, I have finished digging the contour lines in my fields, now I am working on other's land. This collaboration reached even neighbours who do not have a PIP yet. In our group, three have already accepted to collaborate with us and we want to involve others for the continuity of the contour lines. I have now two compost piles well covered, full of compost, ready for the next season. I had planned to have three boxes for bee keeping, I have installed one (Nyamibara Marguerite; Muyinga).*
- *I have come to understand that I did things badly, now I have a plan, now I know (Rwasa Vénantie, Muyinga).*
- *The PIP is important because it avoids us wasting our resources and energy, and it helps us concentrate them in order to reach our fixed objectives (Bikorimana Boniface, Muyinga).*
- *The PIP stimulated me and my family to protect my land. I have contour lines on all my land and I plan to grow forage on them; I have now 2 compost piles covered and I have already installed nurseries for maracuja to cover them. I had before one not covered compost. In my PIP, I planned to have 5 goats after 3 years; now I have bought one. (Bikoringabo André, Muyinga).*
- *The PIP opened my mind to include bee keeping in my activities; I had planned 30 boxes for bee keeping; I have now 10 (Kanyabigunda Etienne, Muyinga).*
- *The PIP inspired me with my family on new crops. Now I grow different kinds of vegetables which provide income and good nutrition to my households (Egide Nsabimana, Gitega).*
- *I started to use improved farming methods and to integrate different activities in my farms. I have now fruit trees, agroforestry, I have now a cow and increased harvest (Felix Bamporubworo, Gitega).*
- *I was now able to buy 2 goats. Without the PIP I could not have done this (Desiré, Gitega).*
- *Now I understand how I can protect my land from erosion and how to produce more.*
- *I used to waste my finances but with the PIP I learnt to make savings and I bought a pregnant Pig which gives birth to 8 small pigs (Renilde, Makamba).*
- *Now with the PIPs, there is peace in the households, because people avoid to lose their means for useless matters to have savings for PIP implementation (Nduwimana Oscar, Muyinga).*
- *There is one thing I will never forget: before I was trained in PIP, I used to do whatever came in my mind without planning and consultation of my family members. But now, we have a plan which is enriched with my wife and children's inputs and I expect a good future when we will have implemented it;*
- *The PIP stimulated collaboration among us (Nyamibara Marguerite; Muyinga).*
- *Me and my wife had different aspirations, but now we work together on the same plan.*
- *I have new hope for the future, and I know what I want to achieve.*
- *My head was closed, now it is open because of the PIP trainings.*
- *With the PIP, we learn to look far like an eagle and not like a hen which sees just in front of its feet.*

Annex 2 PIP activities and budget

The budget below is an overview of a suggested schedule for starting PIP activities in 4 villages based on experiences in Burundi, as well as a very rough budget for these activities. All PIP activities are suggested to be carried out by 1 staff member (PIP assistant / facilitator). All costs related to transport and salaries of the staff is excluded from this budget; hence, it only indicates what is needed for implementing PIP in the villages.

In the workshops transport costs of participants are refunded and a small lunch or some drinks are given, usually prepared by the community members. The PIP image box is foreseen to be copied, in countries starting with PIP the images still have to be designed based on local context (costs not included in this budget).

Leaflets of different agronomic practices are the most common training materials: we suppose these are available from extension services and only copies are needed. No costs are foreseen for other (collective) PIP activities such as tree nurseries: this to be decided by the project. No incentives or cash is given in any occasion: the PIP approach must be as cheap as possible to be successful!

Activities	Estimated costs	Total
<u>YEAR 1</u>		-
- Define and discuss implementation with each case country	- No costs	- 0 €
- Exchange visit of staff to PIP project and workshop	- Lumpsum total	- 1,000 €
- Copy the image boxes for PIP creation with PIs	- 80 € per image box times 50 PIs	- 4,000 €
- Select the PIP villages (2 villages now, 2 villages later)	- No costs	- 600 €
- Village awareness raising / Assembly meetings in 4 villages	- 1 workshops per village of 150€	- 600 €
- Select 20 Farmer Innovators (PIs) in each of the 2 villages	- No costs	- 0 €
- PIP creation starts in 2 villages (with 50 PI - 7 workshops)	- 100€ / workshop (14 workshops)	- 1,400 €
- Workshops (technical) for sustainable agriculture with PIs	- 100€ / workshop (10 workshops)	- 1,000 €
- PIP implementation by PIs (according to own action plan)	- Costs carried by the PIs	- 0 €
- Exchange visit with the PIs to PIP project	- Transport and lunches (1000/village)	- 2,000 €
<u>YEAR 2</u>		
- Copy the image boxes for PIP creation with PIs	- 80 € per image box times 50 PIs	- 4,000 €
- Select 20 Farmer Innovators (PIs) in the other 2 villages	- No costs	- 0 €
- PIP creation starts in 2 villages (with 50 PI - 7 workshops)	- 100€ / workshop (14 workshops)	- 1,400 €
- Workshops (technical) for sustainable agriculture with PIs	- 100€ / workshop (10 workshops)	- 1,000 €
- PIP implementation by PIs (according to own action plan)	- Costs carried by the PIs	- 0 €
- Exchange visit with the PIs to PIP project	- Transport and lunches (1000/village)	- 2,000 €
- Open Day in each village (announcing 1 st PIP competition)	- Materials & drinks: 1000€ / village	- 4,000 €
- Training of PIs in Farmer-to-Farmer training	- 150€ /workshop (4 x 2-day workshop)	- 600 €
- First PIP competition for the scaling-up of PIP creation	- Materials (leaflets): 1000€ / village	- 4,000 €
- Graduation days and certification of Farmer Trainers	- Rewards & drinks: 1000€ / village	- 4,000 €
- PIP implementation by 2 nd generation PIP farmers	- Costs carried by farmers	- 0 €
- Workshops (technical) for sustainable agriculture with PIs	- About 10 workshops /year + materials	- 4,000 €
<u>YEAR 3</u>		
- Open Days / exchange visits (+ local institutions)	- Materials & drinks: 1000€ / village	- 4,000 €
- Village vision development by means of village workshops	- 100€ / workshop x 5 per village	- 4,000 €
- Second PIP competition for scaling-up to whole village	- Leaflets/rewards/drinks: 3000€ each	- 12,000 €
- Start of PIP scaling-up: identify/train new farmer trainers	- To be done in PI workshops	- 0 €
- Exchange visits with neighbouring villages and authorities	- Lumpsum total	- 6,000 €
- Materials (leaflets etc.)	- Lumpsum total	- 6,000 €
- First PIP competitions in the neighbouring villages	- Lumpsum total	- 10,000 €
- Further scaling-up in neighbouring villages	- Lumpsum total	- 10,000 €
- Local workshop to disseminate results / PIP	- Lumpsum total	- 4,000 €

Annex 3 Additional examples of PIPs





Annex 4 Overview of PIP image box

Overview of PIP image box: the process of PIP creation

1. Brainstorming on current problems
2. Exchanges on possible alternatives
3. Presentation of PIP components
4. **Current situation drawn in the PIP**
5. Family Sheet: Members of the household
6. Family Sheet: The possessions of all members
7. Family Sheet: The strengths and weaknesses
8. Family Sheet: Knowing the causes, reflecting about solutions
9. Family Sheet: The Family Tree
10. Family Sheet: Burundian proverb : when the heart is touched, the legs wake up early
11. **Desired future situation, the dream PIP**
12. The PIP on a visible place
13. By implementing PIP, production and collaboration increase
14. PIP can lift families out of poverty!



7

5.C. INGUUVU N'AMAHIRWE VY'UMURYANGO IYO BISHIZWE HAMWE NIVYO BIWUFASHA KWITEZA IMBERE

8

5.D. KUMENYA INTANDARO Z'INGORANE Z' UMURYANGO BIRAFASHA KU ZITORERA UMUTI UBEREYE

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5.E. IGITI SHUSHO Y'UMURYANGO
IYO HABAYE UMWIMWEZO W'IBIRANGURWA N'INGENE UBURYO BUKORESHA. BITUMA UMUGORE N'UMUGABO BUMVUKANA NEZA IBIKORWA BOSHIMIKIRAKO, N'INGENE BOKORESHA NEZA UBURYO BW'UMURYANGO.

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5.F. AKABABAJE UMUTIMA KAZINDURA AMAGURU, IYO ABAGIZE UMURYANGO BIHAYE IHANGIRO BIPFUZA GUSHIKAKO KU KIRINGO BISHINGIYE. IVYO BIBAKABURIRA GUKORA BIVUYE INYUMA NGO BARISHIKEKO

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6. MU NTEGURO Y'UMUGAMBI (PIP-MBONIYONGANA), UMURYANGO URIHA ISHUSHO Y'AHU UGANA MU KIRINGO WISHINGIYE

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7. UMUGAMBI (PIP-MBONIYONGANA) UMAZE GUPFUNDIKWA URAMANIKWA AHO BENEWO BAGUMA BAWUBONA BIHWEZA IYO BAVA N'IYO BAJA

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8. ISHIRWA MU NGIRO RY'UMUGAMBI (PIP - MBONIYONGANA) RITUMA IMIRYANGO IGWIZA UMWIMBU, UGUKORERA HAMWE KWABO KUGATUMA HABA AKARUSHO

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9. UMUGAMBI (PIP - MBONIYONGANA) URAKARAMBA UKARA ABANTU MU BUKENE !

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