

Booklet

Organization of an agricultural inland valley development project

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Summary

I. Introduction: Goal of the guide	Page 3
II. Preparatory work	Page 4
III. Recruitment	Page 6
IV. Purchase of tools and work equipment	Page 8
V. Training for supervisors and technicians	Page 10
VI. List and calendar of activities	Page 12
VII. Communication with and between actors	Page 13
VIII. Fieldworks organization	Page 14

About AfricaRice and Afrique-learning

AfricaRice:

AfricaRice is a leading pan-African rice research organization committed to improving livelihoods in Africa through solid science and effective partnerships. AfricaRice is a research center of CGIAR, which is part of a global research partnership on future food security. It is also an intergovernmental association of African member countries. Today, it has 30 member countries. The mission of AfricaRice is to contribute to poverty reduction and food security in Africa through research, development and partnership activities, aimed at increasing the productivity and profitability of the rice sector so as to guarantee the sustainability of the agricultural environment.

Afrique-Learning:

Afrique-learning is a Beninese cooperative which creates and manages vocational e-learning courses specially designed for African youth. Courses are tailor-made in collaboration with experts in the field with the aim of producing interactive, illustrated, interesting and easy-to-study courses that provide the student with important information in simple and appropriate language. Learning is done independently at the student's own pace, it is assessed and a course certificate is attained following a final test. Courses are available on computer, smartphone or android tablet. They only require a very modest bandwidth and are therefore within the reach of students. Registration and classes are free.

Acknowledgements

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Sources of images

- [1] Photos delivered by AfricaRice
- [2] Photos delivered by Ayewa Tchatchibara, Institut Togolais de Recherche Agronomique (ITRA), Togo
- [3] Illustration delivered by EUDOX BÉATITUDES

Sources of tables

- [I, II] Developed by Ayewa Tchatchibara de l'Institut Togolais de Recherche Agronomique (ITRA), Togo.
- [III] Developed by the training team

Reference

This guide is based on the material originally developed by Ayewa Tchatchibara, Institut Togolais de Recherche Agronomique (ITRA), Togo.

I. Introduction: The goal of this guide

Project management is a very complex task. You must coordinate different areas and different service providers. You must design the project in such a way that the objectives of the project are reached and the funder's criteria are respected.

This guide helps you, as a project coordinator, to organize your project. It will help you keep the most important points in mind and give you valuable practical advice for the implementation.

Be sure to read the other guides that are relevant to you in order to incorporate aspects such as the influence of gender or the concept of sustainability in the planning of your project.

Good luck in the planning of your inland valley development project using the *Smart-Valleys* approach.



Supervisor training [1]



Technicians visit a group of producers [1]

II. Preparatory work

First steps: Discovery of the area

The first step is to define the objectives of the project. Then to identify the goal to be reached. Finally, it is necessary to determine the activities to be completed to achieve this goal.

The objectives being defined, you need to know or identify the area. Then it is necessary to make a bibliographical study of the area. This bibliographical study will lead you to meet administrative, religious, cultural authorities, etc. You will thus be able to know what are the different activities carried out in the field and who are the different actors.

You then make contact with these actors. This will allow you to identify the different means to implement your project: material and human resources.

After the bibliography of the area, you will conduct a diagnostic study based on socio-economic and geospatial surveys of the area. This study will make it possible to locate the inland valleys and to determine roughly their size and use, in agricultural, touristic, cultural terms, etc. For this study, the recruitment and the training of investigators will be necessary.

Possible difficulties and how to resolve them

In this kind of work it is not uncommon to encounter obstacles posed by certain administrative, political or even religious authorities. The same is true for the field technicians. In these conditions, it is best to refer to the hierarchy who can advise you. So before arriving in the area, you need to know the relationships between the different actors.

It may also happen that the bibliographic data is old. You must then search by all means for recent data in the appropriate departments.

Practical advice

The information collected must be well analyzed to avoid errors when setting up the project. If possible, you have to go down on the ground in order to assess the distances, the natural sizes, in short, to get a realistic idea of the reality on the ground.

Do not forget to seek to know the past and current activities of structures working in the same field in the areas of intervention.



Photo 1: Community meeting in Kara, Togo, to collect additional information [2]

III. Recruitment

The recruitment of supervisors and technicians will be done according to your organisation's procedures and requirements. Here we give generic advice and suggestions to make the process easier and as trouble-free as possible.

Choice of supervisors

The supervisors are recruited by invitation to tender. Applications are received and studied by the recruiting structure, under the direction or advice of the project manager. Applications that meet the criteria are selected and these candidates are called for an interview. At the end of this test, the best candidates are selected.

The selection criteria for supervisors:

- At least 2 years of experience in inland valley development for rice production.
- Having completed all the *Smart-Valleys* toolkit training courses on inland valleys selection and development.

Where to find and how to choose technicians?

The technicians are recruited in the field in the target areas. They are producers who have done at least the 3th year in secondary school and who are able to write an activity report. They are selected with help from the extension structure operating in the area. The recruiting structure retains those who meet the criteria set.

The selection criteria for technicians are:

- Having seen the development work according to the *Smart-Valleys* approach
- Speaking the local language is an asset
- Also take into account the physical endurance of these persons in the field



Technicians interviewing producers [3]

Possible difficulties and how to solve them

When recruiting supervisors and technicians, it often happens that some turn out to be ineffective from the start. They will be replaced without any hesitation.

For the supervisors, since they are called upon to support technicians in the field, they must master the modules both in theory and in practice. They must be able to be proactive.

For technicians, they must be comfortable in the communication, the transmission of their knowledge and know-how.

Both supervisors and technicians must be willing and able to learn.

Practical advice

After interviewing supervisors and technicians, you should retain all those who have the minimal requirements and above. Fill in all the positions for your desired workforce and keep the others on a waiting list. In the event of issues or resignation, the most deserving candidates on the waiting list will be called in order of merit. They will undergo on-the-job training and a close monitoring in the field if they are technicians and an accelerated classroom training if they are supervisors.

Avoid recruiting already overworked technicians or supervisors. Very often the latter perform many other activities that they hide during the interview. Make in-depth investigations to understand this.



Technicians observing an inland valley developed in Savalou, Benin [1]

IV. Purchase of tools and work equipment

Purchasing will be done according to your organisation's procedures and requirements. Here we give generic advice and suggestions to make the process easier and as trouble-free as possible.

Procedures for tool and equipment purchase

The project manager addresses the list of material requirements. Depending on the procedures of the structure hosting the project, the following steps can be simplified or detailed:

- The list will be developed and costed by an accountant and then, if possible, verified by a financial controller.
- The list will then be used for a call for tenders. A deadline will be communicated to economic operators for the submission of their offers.
- The choice of the best offer will be made according to the laws and rules in force. This can include: the public opening of tenders, their review by a committee, the possibility of a second round after communication of a preliminary report and finally the validation of the choice by a financial controller.

The successful service provider must deliver the equipment in accordance with the deadline stipulated in the invitation to tender. A good part of the contract is normally paid at this time (90% for example) and the rest one year after satisfactory use of the material.

Necessary tools for technicians and supervisors

The table 1 below shows an example of a tools' list for a project with a coordinator, 5 supervisors and 20 technicians scheduled for a period of two years.

As an example, there were 10 cans of paint thinner (4.5 l each) that were distributed to supervisors who received 2 each.

Table 1: Material planned for activities and connection to the fleet

#	Designation	Coordinator	Supervisors	Technicians
01	Laptop computer	1	5	0
02	USB Modem key	1	5	0
03	Android Phones/Tablet	1	5	20
04	Boots	1	5	20
05	Waterproof	1	5	20
06	Rope	0	5	20
07	Paintings (5 colors)	0	0	20 lots
08	Paint brushes	0	0	80
09	Decameter	0	0	20
10	Diluent/paint thinner (4,5 l)	0	10	0
11	Internet connection contract	18 months connection	5 months connection	18 months connection

Possible difficulties and how to solve them

It will be important to test the material before sending it to users. For example, USB Modem keys must be checked with computers, as well as their connection to the mobile network.

It is useful to collect information from users before ordering, to ensure the quality of the material, for example, the sizes for boots.

V. Training of supervisors and technicians

How to organize training sessions for supervisors and technicians

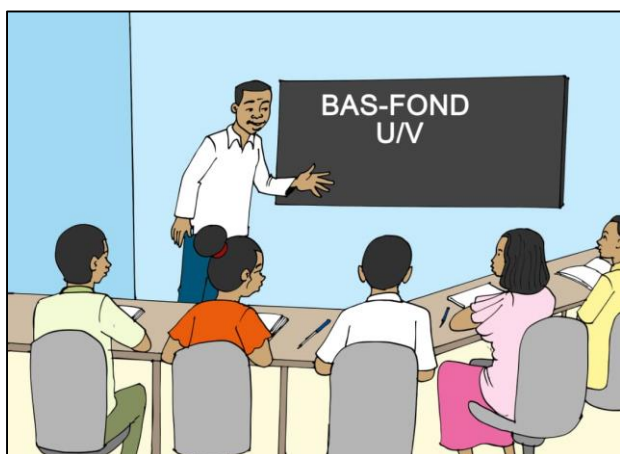
- The training of supervisors is shorter than that of technicians. Since this is a refresher course for them, the modules should be grouped into two groups requiring 2 training sessions. The first group contains modules from gender issues to the selection of inland valleys, and the second group from inland valley development to sustainable use.
- After the completion of the first training session, the supervisors are sent back to select suitable inland valleys. This step is part of the practical phase of the training. They are then invited to the second training session which ends with a simulated technicians' training where supervisors take turns to test their ability to deliver the training modules. Modules are to be assigned in advance at the end of the first training session. During these exercises, the capacity of supervisors to give good training must be developed.
- The training of technicians is to be carried out by the supervisors under the supervision of the project coordinator and the main trainer (someone very familiar with the *Smart-Valleys* approach). In the same way as the supervisors, after the first sessions, the technicians must return to their respective areas to select inland valleys before coming back a few weeks later to follow other training modules. During these sessions, there are two field trips to allow learners to practice inland valleys selection, to distinguish inland valleys from alluvial plains and to see how the inland valley development is made: drawing development scheme, picketing, making bunds and drainage and irrigation canals, etc.

Possible difficulties and how to solve them

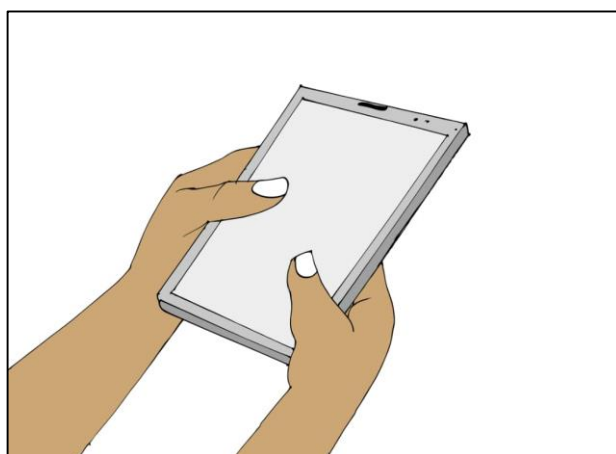
For the training of supervisors, the major difficulty may be their limited communication skills. By virtue of their profile, they master the subject matter but they may have difficulties in transmitting this knowledge. Everyone must take the course in his or her own way. The exercise of simulated training by the supervisors at the end of their training session is therefore very useful.

At the end of each course, the main trainer summarizes the module(s) that has been covered and a debate is always initiated to allow trainees to ask questions and deepen their understanding.

You must always be attentive to the development of the course in order to detect possible shortcomings and to be able to correct the imperfections.



Classroom training [3]



Online training [3]

A mixed training is always preferable: combine the two training approaches, face-to-face and online. Organize face-to-face events where needed and organize online knowledge transfer where possible.

Use the *Smart-Valleys* toolkit, it offers online training on all relevant topics. Offer your technicians and service providers the opportunity to exploit the full potential of these courses and ensure you link the face-to-face teaching as closely as possible to the online courses. This applies to classroom training and field trips.

VI. List and calendar of activities

Table II: Example of a list of activities - preparatory work included - with a specification of duration and actors or organizations involved for each activity. This example corresponds to a development project of 70-140 inland valleys, for which 5 supervisors and 20 technicians were recruited.

#	Activities	Duration	Actors or key organizations
A	Project planning	Up to 5 months: necessary period for setting up the project	The institution carrying the project Partner institutions
B	Bibliographic study of the project	2 months to make contact with all relevant actors	Ministry in charge of planning and its decentralized services NGOs working in the field Institution carrying the project
C	Exploratory study	3 months (or more depending on the number and the size of the area) to recruit investigators, train them and conduct field surveys	Institution carrying the project The project coordination The investigators
D	Recruitment of supervisors and technicians	2 months to recruit the supervisors and technicians	Project coordinator Human resources manager
E	Training of supervisors	Two sessions of 4 days in a period of 1 month, sessions separated by 2 weeks for practicing inland valley selection	Project coordination The main trainer The supervisors
F	Training of technicians	Two sessions of 6 days in a period of 1-month, sessions separated by 2 weeks for practicing inland valley selection	Project coordinator The main trainer The supervisors The technicians
G	Continuation of selection and development	10 months for the selection and development of inland valleys	The supervisors The technicians
H	Monitoring-evaluation, geo-referencing of developed inland valleys and collection of additional information	4 missions of 12 days over 4 quarters	Project coordinator The supervisors The technicians
I	Monitoring-evaluation, geo-referencing of developed inland valleys, collection of additional information and final evaluation	2 missions of 12 days per semester with the regional coordination	Project coordinator Regional coordination The supervisors The technicians

Table III: Chronology of activities (letters refer to the activities described in the table above)

Month	1	2	3	4	5	6	7	8	9	10	11	12
Year 1	A					B		C			D	
											E	F
Year 2	G											
			H		H		H		H			
						I				I		

VII. Communication with and between actors

How to organize the communication between coordination, supervisors and technicians in the field?

It is essential that the means of communication allow very regular contacts between all these actors, as well as the exchange of working documents and digital photographs.

Supervisors must therefore be equipped with smartphones and laptops with internet access via USB modem key for computers. The technicians will be equipped with an Android tablet with a SIM card for internet access and telephone communications.

The costs of the internet connection and communication are covered by the project.

Short and urgent messages will be exchanged by phone and on a WhatsApp group created for this purpose. Longer messages and attached documents will be exchanged by email.

How to organize communication between supervisors and technicians?

The cell phones are the main communication tools for information exchange between supervisors and technicians. If it is available from the cell phone network, a "fleet" type contract is preferable, as it allows all the cell phones of supervisors and technicians to be linked into a group in which calls and SMS are prepaid.

The creation of a WhatsApp group for these actors allows them to share questions, answers and recommendations in a very powerful way.

Possible difficulties and how to solve them

Possible difficulties relate to the availability of the network and its spatial coverage. To alleviate this difficulty it is necessary to carefully select the mobile phone network with the best coverage. It is therefore necessary to better explore the mobile telephony market to identify the network that best serves the project's needs.

VIII. Organization of fieldwork

How to approach the regions of intervention?

As soon as the project is set up (definition of objectives, identification of the goal to be achieved, determination of the activities to be carried out, etc.), if the project is national in scope, it needs to be formalized at the government level. The discussion begins here at the central level, with the ministry in charge of agriculture or the ministry concerned with land and water management issues. After this first contact, the ministry in question puts you in touch with its decentralized structures located in the regions. At the regional level, you first contact the administrative authorities before joining the regional services concerned. With these services you identify the areas where inland valleys can be found and the technicians working there. You also identify the development structures or organizations operating in the field.

After these first levels of contact in the region, you make appointments in the intervention area with, first of all, the village or local chiefs and then with the populations. These meetings take place with the technicians who work in these places. You explain at each level the objectives of the project, the aims, the activities to be carried out, the working method and the means of implementation.... Everything needs to be clear in everyone's mind from the start.

How to monitor the work progress?

The progress of field activities is monitored at 2 levels: i) at supervisor level and ii) at coordination level.

At the supervisor level, the works carried out or in progress are monitored by the supervisor from design to completion. The supervisor receives a briefing every weekend from the technicians, then consolidates them at the end of the month and submits his report to the coordination. He therefore makes a monthly report of his own activities and introduces the technicians' reports there, before sending it to the coordination.

5 days before the end of the month, the coordinator receives the reports from the supervisors which describe the progress of the work at their level and at the level of each technician under their responsibility, summarising the difficulties encountered as well as the approaches to solutions provided.

How to check the fieldwork?

To check the work in the field, the coordination must carry out a monitoring and evaluation mission every quarter. Once a semester, this mission is carried out in collaboration with a team of partner representatives.

All the plots must be geo-referenced to allow their materialization on a map.



An inland valley before harvest [1]



An inland valley after the harvest [3]

How to pay the actors?

It is recommended to use the approach of service delivery, rather than that of contractual hiring of new staff, or consultants. The services are particularly well suited to output-quality-focused, punctual fieldwork, for a relatively short period of time, and which does not require a full-time job for the project duration.

In addition, the services approach make it possible to guide the actors towards the accomplishment of the tasks for which they are paid upon delivery of clearly described deliverables. Note that it is often necessary to plan for operating advances to be paid at the start of each activity, for transport or communication costs, where applicable.

The use of the services is described in another guide which it is recommended to consult at this stage.

If, on the contrary, a hiring contract is necessary, it must be stipulated that the actor is remunerated after the coordination has received their certified report and that the payment must be made by a date defined in the contract.

Possible difficulties and how to solve them

In selecting areas and sites for operations, it often happens that false or incomplete information is given. You have to go back to the field several times to cross-check the information and establish the reality.

It can be difficult to ensure that progress reports arrive on time, as stipulated in the description of the service or the employment contract. This makes it difficult to pay benefits or salaries and it is therefore very important to explain to technicians and supervisors that their remuneration is based on their timely submission of these reports, and on their quality.

It is also desirable to remind the date of submission of reports in advance, to facilitate their writing by the different actors in due time.

It is therefore essential that operating funds are made available to the project manager on time, to ensure that reports submitted on the correct date trigger an almost immediate payment. It is by rewarding good quality work with prompt payment that you can maintain good momentum in the project.

Practical advice

Between the coordination of the project and actors in the field, it is necessary to maintain permanent contact. It takes frank and sincere communication in order to build mutual trust. This will make it possible to obtain convincing results even in the face of inevitable difficulties which are sure to arise.