

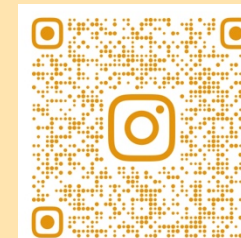
Designing an agroecological territory ideotype for the department of Fatick, Senegal



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A person is riding a horse pulling a cart filled with hay across a field. The scene is set during sunset or sunrise, with a warm, golden light. The background shows a line of trees under a hazy sky. The overall mood is peaceful and rural.

Summary

Salinization, land and mangrove degradation, loss of soil fertility, low value-added of local products... the actors in the Fatick department are faced with challenges that are as complex as they are intertwined.

To prepare for the future and build a vibrant, prosperous department, Fatick's Dynamique pour une Transition Agroécologique Locale (DyTAEL) and its scientific partners organized an ideotyping workshop from September 02 to 06, 2024 in Palmarin. For five days, some fifty experts pooled their knowledge to analyze the root causes of the region's imbalance and co-design an agroecological future for the department by 2035.

The group's work began with an analysis of the causes and consequences of the region's central problems, namely the degradation of land, water and biomass, the low value of local produce and the lack of consideration for agroecology in public policy. The analysis of these problems then paved the way for the exploration of solutions, which were compiled and organized in an "innovation box". This box took the form of an organized repertoire of 258 solutions, levers or innovations intended to be used as building blocks for the ideotypes. Finally, participants selected, assembled and organized elements from the innovation box to build an ideotype of an agroecological, resilient and innovative territory in the face of the existential threats facing the Fatick department.

This ideotyping workshop was co-organized by the Fatick DyTAEL, the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) and the Institut Sénégalais de Recherches Agricoles (ISRA), with support from the Agroecology Initiative and the MAHDIA project. The results of the workshop will feed into DyTAEL's 10-year strategic planning and will be presented during the DyTAES-DyTAEL 2025 caravan. The ideotype will thus serve as a compass to guide the department's public policies towards greater consideration of agroecology.

Context

Fatick is a rural department of Senegal where rain-fed agriculture (millet, groundnuts, cowpeas, bissap), sylvopastoral livestock farming, fishing, saliculture and small-scale market gardening are practiced. Due to its specific geographical features - Fatick is located at the intersection of the groundnut basin, the Sine Saloum delta and the coastline - the department concentrates many of the agroecological transition challenges typical of sub-Saharan Africa. Rural populations are faced with major problems of salinization of land and water tables, poor access to productive water, declining tree cover and soil fertility, decoupling of agriculture and livestock farming, uncontrolled use of pesticides in market gardening areas, and food and nutritional insecurity. Climate change and strong population growth are exacerbating this situation, leading to risks of irreversible disruption to the balance of agroecosystems and food systems.

Set up in 2022, **the Dynamique pour une Transition Agroécologique Locale (DyTAEL)** in Fatick aims to make the department an agroecological and resilient territory by 2035. The Fatick DyTAEL carries out advocacy, awareness-raising and networking activities with the aim of integrating agroecology into departmental public policies and fostering the emergence of synergies between local actors. The Centre de Coopération Internationale en Recherche Agronomique pour le Développement (**CIRAD**) and the Institut Sénégalais de Recherches Agricoles (**ISRA**) support the Fatick DyTAEL through two projects: the Agroecology Initiative and MAHDIA. As part of its 2024 action plan, DyTAEL has asked the scientific teams to provide support on **five priority issues**: (i) combating land degradation and its causes, such as salinization, (ii) sustainable management of woody and non-woody biomass resources, (iii) sustainable management of productive water, (iv) adding value to products of territorial interest, and (v) integrating agroecology into public policies.

To project these future challenges within a holistic and integrated framework, CIRAD, ISRA and Fatick's DyTAEL jointly organized an **ideotyping workshop**. For five days, some fifty experts pooled their knowledge to analyze the root causes of the region's imbalance and **co-design an agroecological future for the department by 2035**.

Ideotyping: an innovative design method for the agroecological transition

Ideotyping is a collaborative visioning method developed by CIRAD, which involves imagining the desired future of an agricultural or food system, or a territory, in response to global sustainability challenges. Ideotyping enables researchers and actors to explore radical, systemic changes in the social, economic and material structures involved in agroecological transitions.

Ideotyping involves imagining and defining a desirable, sustainable and resilient future for a community or system, then working backwards to identify the actions needed to achieve that future. This approach provides a framework for guiding stakeholders' strategies and mobilizing decision-makers in favor of agroecological transition.

Ideotyping involves co-constructing one or more ideotypes of agri-food and/or territorial systems within the framework of multi-stakeholder workshops. An ideotype is a coherent theoretical model optimized to achieve precise objectives and overcome identified constraints. To build an ideotype, participants must identify and assemble innovations of various kinds (technical, organizational, institutional) in various fields: agricultural production, regional planning, public policies, value chains, etc. This "coupled" innovation approach enables actors to solve complex problems that could never be resolved by intervention in a single field.

Workshop objectives

ISRA, CIRAD and the Fatick DyTAEL jointly organised a five (5) day workshop in Palmarin, Senegal, from 02 to 06 September 2024, with the aim of co-designing an ideotype of a resilient and innovative agroecological territory in the face of the five priority issues affecting the Fatick department. Part of the Fatick DyTAEL action plan, this **ideotyping workshop** will feed into the DyTAEL's strategic planning and thus contribute to strengthening local governance and advocacy capacities.

The specific objectives of the workshop were:

- (i) analyze the root causes of resource degradation (land, productive water and biomass), the low value-added of local products and the lack of integration of agroecology into public policy.
- (ii) co-construct a wide repertoire of solutions, levers and innovations to address local problems
- (iii) select and assemble these solutions into an ideotype that responds to the region's priority issues.
- (iv) integrate the ideotype designed into the strategic planning of the Fatick DyTAEL.
- (v) share knowledge and experience that can provide food for thought for participants;

Results

At the end of the workshop, participants co-designed:

- A **systemic analysis tree** of the causes and consequences of salinization, biomass, productive water and supply problems for the department.
- An **"innovation box"** containing 258 actions responding to the problems analyzed, and divided into 63 innovation avenues.

- An **ideotype of an agroecological**, resilient and innovative **territory** presenting a coherent set of agroecological practices, resource management actions (productive land, water and biomass), strategies for adding value to local products and integrating agroecology into public policies.

In addition, **inspiring experiences were shared** through plenary presentations (Kamyaak ecovillage, CAREM reforestation actions) and a field visit (Kaydara school farm).



Participants

The workshop brought together 51 participants, including 15 members of the facilitation team and 36 stakeholders recognized for their commitment to the region and their in-depth knowledge of the department's sustainability (Tables 1 and 2 below). Invited experts included representatives of local authorities (communes, département), government advisory services (ANCAR, Service de l'élevage), research centers (IPAR, UCAD), NGOs (AgriSud International, Enda Pronat, CAREM) and civil society actors representing agriculture, livestock, salt farming, agri-food processing, tourism, youth, women and environmental management. Innovative initiatives such as the Kaydara school farm and the Kamyak eco-village also took part. The number of participants was stable over the 3 days of the workshop, fluctuating between 49 and 51. A full list of participants is **attached**.



Table 1: Breakdown of animation team roles

Animation team members	Structures	Role
Modou Gueye Fall	ISRA BAME	Facilitation and reporting
Banna Mbaye	ISRA LNRPV	Facilitation and reporting
Raphael Belmin	CIRAD / ISRA BAME	Coordination / Photography
Marc Piraux	CIRAD / ISRA BAME	Facilitation and reporting
Oumar Lo	ISRA BAME	Com. / facilitation / reporting
Cherif Mané	ISRA BAME	Facilitation and reporting
Mame Birame Sene	CT DyTAEL of Fatick	Coordination support
Coumba Ndooffène Ndour	CT DyTAEL of Fatick	Facilitation and reporting
Abdou Senghor	CT DyTAEL of Fatick	Facilitation and reporting
Arame Diouf	DyTAEL Secretariat	Facilitation and reporting
Abdou ka	UASZ	Facilitation and reporting
Ndeye Bity Kebe	ISRA CNRF	Facilitation and reporting
Diouma Cor Fall	ISRA CNRF	Facilitation and reporting
Ibrahima Diallo	ISRA BAME	Facilitation and reporting
Geneviève Dione	ISRA BAME	Facilitation and reporting

Table 2: Profile of participants (including the animation team)

Field of activity	Number of participants
Tourist operator	1
Women's associations	1
Local authorities	8
DyTAEL (Technical Committee)	5
Food processing companies	2
Saliculture company	1
School canteens	1
Agroecological farms	5
Research institutions	13
NGOs / Agroecological associations	5
Producer organizations	3
Drilling management organization	1
Nature reserves	3
State services	2
Grand total	51

Workshop sequence

The workshop took place at the Palmarin Ecolodge (Djiffer) from Monday 02 to Friday 06 September 2024, with the animation team arriving the day before. Work was structured as follows:

- **Sunday:** Preparatory meeting and definition of priority challenges (Step 1);
- **Monday:** Opening of the workshop and construction of the problem tree (Step 2);
- **Tuesday:** Construction of the solution tree and identification of innovation avenues (Step 3);
- **Wednesday:** Construction of the Innovation Box and visit to the Kaydara farm (Step 4);
- **Thursday:** Construction of ideotypes in sub-groups (Step 5);
- **Friday:** Restitution, fusion of ideotypes, evaluation of the workshop and future prospects (Steps 6 and 7).

The detailed procedure is shown in the **Appendix**.

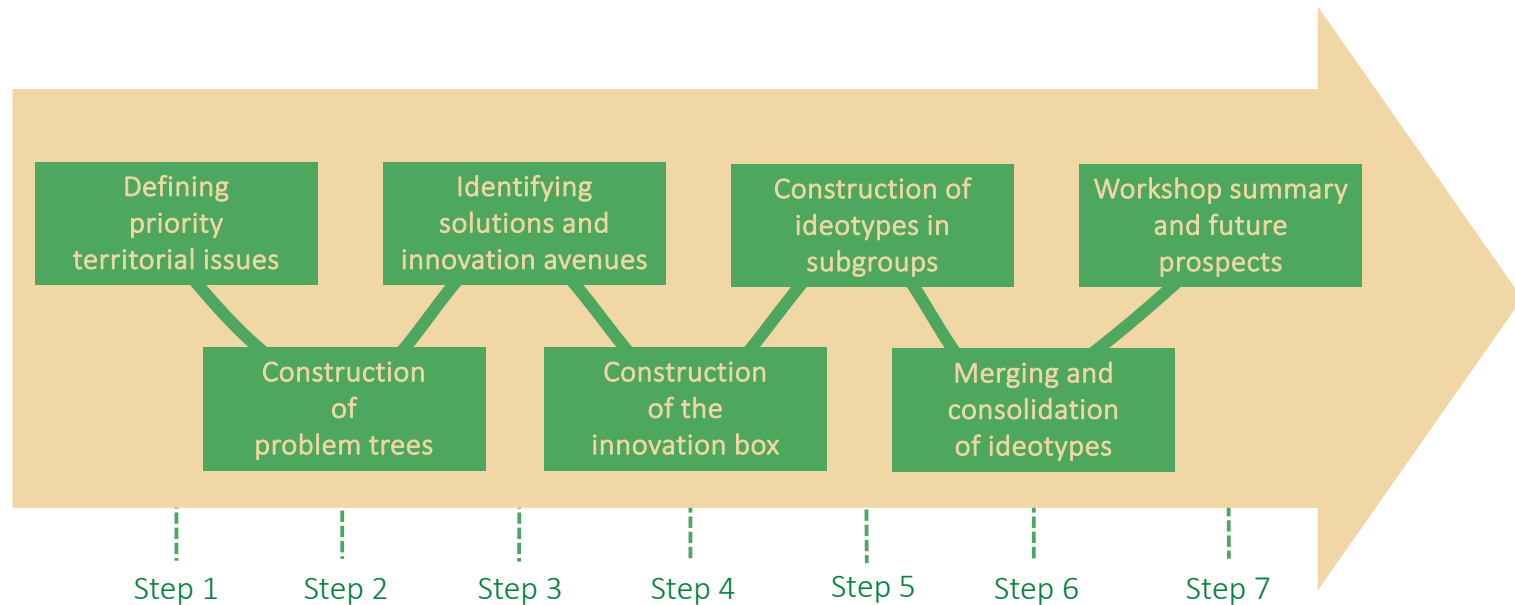


Figure 1: The ideotyping approach adopted during the workshop



Photo: Participants in the ideotyping workshop.

Step 1: Defining priority issues

During a preparatory meeting, the facilitation team defined 5 priority issues for the Fatick department: (1) land degradation (salinization, loss of fertility, etc.), (2) declining forestry resources and herbaceous and woody biomass, (3) poor access to productive water, (4) low value-added of products of territorial interest (millet, vegetable products, etc.), (2) declining forest resources and herbaceous and woody biomass, (3) poor access to productive water, (4) low value-added of products of local interest (millet, rice, salt, cowpeas, vegetables, milk, etc.), and (5) poor integration of agroecology into local public policies. The first three issues reflect a decision by the DyTAEL Steering Committee, which in January 2024 included the ideotyping workshop in its annual action plan. The fourth issue reflects the thinking behind the MAHDIA launch workshop, a project whose priority entry point is food systems. The fifth was decided at the preparatory meeting, in order to open up the field of analysis to public policy.

Step 2: Building the problem tree

After the opening ceremony and presentation of the agenda, the 7-step ideotyping process was presented in plenary. Participants were then divided into 5 groups of 7-8 people, each supervised by two facilitators and a rapporteur, to build a problem tree. Each group organized its thinking around one of the department's 5 priority issues (see Step 1). This work resulted in the construction of 5 trees (one per group) showing how global issues such as climate change, demographic and land pressure, and acculturation are destabilizing the fundamental foundations of the territory (resources such as land, water, maritime and terrestrial forests), leading to serious economic, social and environmental impacts. These 5 trees were merged post-workshop, providing a global vision of the imbalances affecting the Fatick department (**Figure 2**, page 9).

Problem and solution tree

Group work instructions

Objective: The aim of this sub-group exercise is to build a shared analysis of the root causes and consequences of local problems. Problem identification then serves as the basis for exploring solutions.

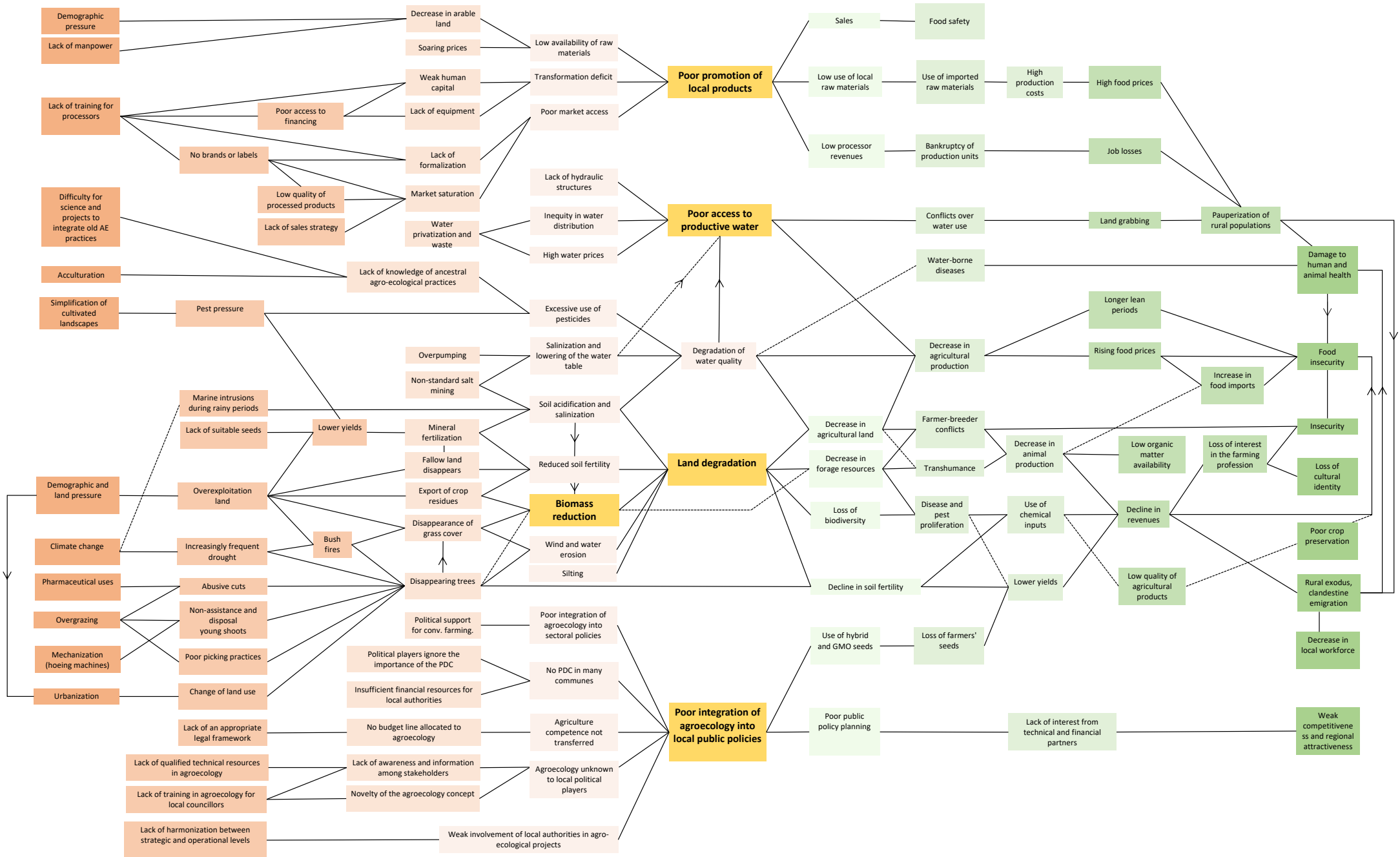
Working on causes: Starting with one of the region's 5 priority issues, the group must first identify its direct causes, and work backwards through the causal chains. A problem often has several causes, and each cause can itself be explained by several phenomena. The result is a tree structure of primary, secondary, tertiary and so on causes.

Working on consequences: Having analyzed the causes, the group then embarks on a similar exercise, focusing on the consequences and impacts of the region's central problems. The focus here is on identifying primary, secondary and tertiary impacts, as well as possible feedback loops. For example, declining biomass leads to declining soil fertility (primary impact), which in turn leads to lower yields (secondary impact) and food and energy insecurity (tertiary impact), which in turn encourages people to harvest and prune ever more (feedback loop).

Exploring solutions: The group transforms the problem tree into a solution or innovation tree. To do this, they stick a green post-it note (solution) next to each red post-it note (problem). Solutions can be of many different kinds: technical, agronomic, organizational, institutional, etc.

Problem tree

Figure 2: Synthetic problem tree compiled from the work of the 5 sub-groups. Causal relationships are shown from left to right. The priority problems that served as a starting point for the group work are in yellow. Their causes are in orange and their consequences in green.



Problem tree

ANALYSIS

The problem tree is briefly analyzed here to provide an overall view of the problems affecting the Fatick department. This analysis of problems must be treated with caution, however, as it reflects only the perception of the workshop participants.

Land and biomass degradation - This is mainly the result of salinization and acidification due to uncontrolled salt exploitation and marine intrusions, the latter phenomenon being accentuated by climate change and rising oceans. Degradation is also linked to the widespread use of mineral fertilizers in response to falling yields in a context of proliferating bio-aggressors, a lack of suitable seeds, and over-exploitation of the land due to demographic pressure. The erosion of soil fertility is exacerbated by the absence of fallowing and the systematic export of harvest residues. Land degradation is also caused by the loss of biomass, bush fires, droughts, abusive tree-cutting and the conversion of arable land to housing. Wind and water erosion, favoured by the disappearance of trees, also contribute to this phenomenon.

The consequences of land degradation are manifold: on the one hand, the reduction in cultivated areas leads to lower production, higher food prices and increased food insecurity. On the other hand, fodder resources are diminishing, increasing the dependence of livestock breeders on transhumance and provoking conflicts between farmers and livestock breeders. As animal and crop production declines, populations are increasingly dependent on imports. Falling yields encourage the use of chemical inputs, reducing producers' incomes and eroding interest in the farming profession, threatening cultural identity and exacerbating food insecurity. Finally, the loss of biodiversity encourages the proliferation of pests, making the use of chemical products even more necessary.

Poor access to productive water - This is primarily due to the lack of hydraulic infrastructure, inequality in water distribution, and the high cost of water in a context of privatization of boreholes. Poor access to water is also the result of deteriorating water quality, due to salinization and depletion of groundwater in a context of overpumping and unregulated exploitation of water resources. The excessive use of pesticides also contributes to this degradation, but remains encouraged by the pressure of bio-aggressors, and the non-recognition of ancestral agroecological practices by science, projects and the farmers themselves. Poor access to water leads to conflicts over its use, land grabbing and the impoverishment of rural populations. The decline in water quality reduces agricultural production and brings with it diseases that degrade human and animal health, and accentuate the risks of food insecurity.

Low value-added of local products - This is largely the result of limited market access, due to a lack of formalization, the absence of brand names and market saturation. The problem is compounded by a processing deficit, resulting from a lack of human capital and equipment. Lastly, raw materials are difficult for processors to access, due to the reduction in arable land a result of demographic pressure and labor shortages. All this has three consequences: low incomes for processors, leading to bankruptcies and job losses, which in turn exacerbates rural poverty; increasing reliance on imported raw materials, which raises production costs and the price of agri-food products on the local market; and slow sales, which increase the risk of health insecurity.

Problem tree

ANALYSIS

Weak integration of agroecology into public policies - This is primarily due to a lack of involvement of the State and local authorities in the agroecological issue, as well as a lack of harmonization between strategic and operational levels. It is particularly difficult to develop local agroecological policies given the absence of communal development plans in many localities, and the lack of financial resources allocated to local authorities. Competences in the field of agriculture are not transferred, and communes have no budget dedicated to agroecology, in the absence of an appropriate legal framework. What's more, the relatively new concept of agroecology remains unknown to local political actors, who have not been made aware of it. As a result, farmers are free to use conventional techniques and adopt hybrid seeds to the detriment of peasant seeds. This lack of political planning also discourages technical and financial partners, weakening the region's competitiveness and attractiveness.



Step 3: Exploring solutions and innovation avenues

The second day of the workshop kicked off with two **inspiring initiatives shared** by workshop participants: (1) Abibatou Barry and Mouhammad Djibril Gaye presented Kamyaaak, an ecovillage where a community is experimenting with a lifestyle model based entirely agroecology, spirituality and the quest for empowerment. (2) Idrissa Séne presented CAREM, a federation of associations working regenerate mangrove ecosystems and conserve biodiversity in the Fimela district and surrounding islands.

Following this feedback, group work resumed with the construction of the **solution tree** (see **box** on page 8). Starting from the chains of problems and consequences established the previous day, participants systematically explored solutions. The combined work of the different groups led to the identification of a wide range of levers (agronomic, organizational, etc.), which were then grouped into "innovation avenues". An **innovation avenue** brings together one or more solution options that share the same logic of action. For example, the solutions "*stone barriers*" and "*shrubs in watersheds*" were grouped together under a single innovation avenue called "*erosion control*". In this way, the group's work has led to the emergence of 63 innovation avenues enabling land to be restored, forest resources and biomass to be regenerated, access to productive water to be improved, products of local interest to be valorized and agroecology to be integrated into local public policies.

Step 4: Building the innovation box

On the third day, the exercise consisted in **increasing the number of solution options for each innovation avenue** identified the day before (see **box** below). This expansion work resulted in the construction of 258 options, which together form an "innovation box". This innovation box is an organized repertoire of solutions, levers and innovations intended to be used the following day as building blocks for the ideotypes. It is summarized in **Table 3** (page 13) and presented in greater detail in the **Appendix**.

Building the innovation box

Instructions for group work

Each group is asked to broaden the innovation avenues identified the previous day, by identifying at least 5 options for action per avenue. To do this, the group uses post-it notes to complete a blank table that cross-references the innovation avenues (in rows) with the 5 options (in columns). The 5 options for action to be defined for each avenue must be potentially complementary actions that can be rolled out in space, time or according to groups of actors with specific responsibilities and skills. For each action in the table, participants are asked to construct a simple sentence explaining what the action consists of ("does what"), who the responsible actors are ("who"), what resources are required ("how") and where the action should take place ("where").






Once the table has been completed, the groups rotate to discover and amend/enrich the proposals of the previous groups. This "world café"-style format enables participants to assimilate all the innovation avenues and options. Once each group has gone through the various tables, they are assembled side-by-side on a wall, for a better visualization of the collective work accomplished. Together, the tables form an "innovation box", which will be used again the following day, during the ideotyping phase.

On a Google Drive or Excel, the reporters for each group digitize the results as the group progresses. The same evening, the project team finalizes and prints the innovation box on A3 sheets.

Innovation box

Table 3: Innovation box obtained at the end of the third day of the workshop. The box includes 63 innovation avenues (V1-V63) associated with 258 action options. These avenues and actions were constructed by the sub-groups, with the aim of responding to issues of land restoration (blue), biomass regeneration (pink), access to productive water (yellow), valorization of products of territorial interest (green) and integration of agroecology into public policies (gray).

Innovation avenues		Option 1	Option 2	Option 3	Option 4	Option 5
V1	Organic inputs	Organic matter collection	Spreading organic matter	Raising awareness of organic matter	Organic matter formation	
V1 (bis)	Organic inputs (continued)	Liquid biofertilizers	Green manure	Compost	Beneficial indigenous micro-organisms (BAM)	
V2	Agriculture-livestock integration	Parking contracts	Agriculture-livestock rotation (territory)	Farmer-breeder relations	Farm-livestock rotation (farm)	
V3	Reasonable use of pesticides	Biopesticides training	Service plants	Pesticides awareness	Control committees	
V4	Erosion control	Stone strings	Watershed shrubs	Herbaceous watersheds	Crop residues	
V5	Groundwater management	Retention basins	Water platform	Water transfer network		
V6	Protection against advancing salt	Anti-salt dykes	Reforestation of salt-affected areas	Peanut shells and phosphogypsum	Fertilization against salinization	
V7	Supervision of salt mining	Storage warehouses	Salt trails	Salt mining governance		
V8	Ecological intensification of livestock farming	Parking	Forage crops	Animal breeds		
V9	Ecological intensification of agriculture	Participatory innovation	Support and advice	Agro-ecological techniques	Fertilizer plants	Alternating bands
V10	Reforestation	Shelterbelts	Continental and marine reforestation	Defensing	Choice of tree species	Reforestation by soil type
V10 (continued)	Reforestation (continued)	Fertilizer trees				
V11	Assisted Natural Regeneration (ANR)	Identification young trees	Monitoring young trees	RNA Committees	ANR training	
V12	Good management of forest resources	Drilling advocacy	Forest awareness	Safeguarding forests	Forest resource management	Application of the forestry code
V13	Training in timber and non-timber operations	Training in good cutting practices	Training in good picking practices			
V14	Bushfire control	Installation of firewalls	Bushfire awareness	Early fires		
V15	Creating green towns and villages	Raising awareness of green cities	A plea for green cities	Integrating trees into building permits		
V16	Combating soil salinization	Anti-salt dykes	Mangrove reforestation	Anti-salt reforestation	Use of crop residues	
V17	Compliance with laws and regulations	Ban on marine sand mining	Rigorous application of texts			
V18	Forage crops	Forage plant identification	Forage species	Forage improvement techniques	Green jobs	Promotion of forage crops
V18 (bis)	Forage crops (continued)	Crop associations and forages	Forage processing units			
V19	Promoting renewable energies	Blogas development	Village wood-energy production	Improved fireplaces		
V20	Updating forest management plans	Forest code awareness	Layout plan information	Defensing		
V21	Setting up PAOS	PAOS advocacy	Grazing area	Defensing		
V22	Forest resource management plan	Local forestry agreements	Forest innovation platforms	Forest management committees		
V23	Local land use and development agreements	Local agreements	Awareness and information meetings	Land zoning	Definition of convention rules	Adoption of the agreement
V24	Agroecology training courses	Information and awareness-raising meetings	Training offers	Training partnership agreements	Agroecology training guidelines	Learner training
V25	Access to land	Raising awareness of access to land	Deliberate granting of leases and land titles	Land development		
V26	Diversification of income-generating agricultural activities	Arboriculture	Vegetable growing	Breeding	Arable crops	
V27	Efficient water management system	Inclusive water management	Water management training	Administration training	Seat installation	
V28	Reactivation of ancient agroforestry practices	Grove restoration	Restoring communal and village woods			
V29	Raising awareness of cultural identity among younger generations	Directory of ancestral practices	Selection of ancestral practices	Target beneficiaries	Skills transfer	
V30	Rehabilitation and reinforcement of hydraulic infrastructures	Identification of structures	Strengthening management capabilities	Rehabilitation of structures	Water reclamation	
V31	Extension and modernization of hydraulic networks	Drinking water supply	Extension of water networks	Desalination plants		
V32	Salt recovery	Salt farming training				
V33	Adopting water-saving practices	Economical farming practices	Agroecological surveys	Capitalization	Pooling	
V34	Productive water price reduction policy	Water pricing consultation framework	Consensus on water prices			
V35	Promoting family farming	Training household heads	Technical and material support	Slogan		
V36	Promoting farmers' seeds	Training in seed bank construction	Farmers' seed banks	Seed partnerships	Farmers' seed production	
V37	Securing lean periods	Welding storage	Deposit and pre-financing	Diversification		
V38	Training and follow-up	Transformation training	Administrative and financial management training	Storage and preservation training	Hygiene and quality training	
V39	Setting up an interprofession	Inter-profession prospecting	Setting up an interprofession			
V40	Technical and financial partnerships	Mutual partnerships	Banking partnerships	Project partnerships	Chamber partnerships	NGO partnerships
V41	Development of a social economy	Strengthening self-managed cooperatives	Voluntary contribution in kind and/or in cash	Joint and several surety	Flow partnerships	
V42	Diversification of financing mechanisms	Partnerships for financing	Self-financing mechanisms	Loans	Pre-financing	
V43	Creation/strengthening of processor cooperatives	Awareness and leadership	Grouping/Union of transformation players	Formalizing the union	Capacity building for union members	
V44	Agreement with producers	Search for reliable partners	Sample presentation and analysis	Exchange on agreement terms and conditions	Formalizing and signing the agreement	Convention monitoring and evaluation
V45	Innovative marketing and distribution strategies	Market research	Sales areas	E-commerce	Exchange visits	
V46	Creating market niches	Niche market partnership agreements	Market segmentation	Building the offer	Formalization and international authorizations	
V47	Opening up	Open-up partnership agreement	Track construction	Means of transport	Storage	
V48	Attractiveness of the agricultural sector	Attractiveness partnership agreements	Attractive remuneration	Mechanization and reduced drudgery	Monitoring and evaluation of workforce	
V49	Labelling of processed products	Union by sector	Labellisation partnership agreement	Territorial marketing	FRA	Legal recognition
V50	Promoting local consumption	Inter-professional Union	Inter-professional union that signs agreements	Eat local promotion	Culinary art promotion	Tastings
V51	A plea to increase subsidies for organic materials	Institutional support by DyTAEL	Identification of production players	Identifying producers' needs	Meeting with decision-makers	Monitoring and evaluating decisions
V52	Agroecology in Community Development Plans (CDPs)	PDC awareness	Financial mobilization capabilities	PDC design	Agroecology in PDC	PDC monitoring and evaluation
V53	Transfer of agricultural powers to local authorities	Legal advocacy	A plea for the transfer of resources	Budget line	Work plan	PTA monitoring and evaluation
V54	Raising awareness of agroecology	Fora and school fields	Raising awareness of agroecology through community media	Exchange visits and agroecology caravans	Communication materials in local languages	Information meetings
V55	Co-designing agro-ecological projects with local authorities	Harmonizing actions	Mapping the players	Consultation framework	Institutionalization of the consultation framework	Member capacity building
V56	Agroecology in public sector policies	Strengthening advocacy	Creation of communal entities	Capacity building	Planning tools for agroecology	Sectoral policy monitoring system
V57	Training players in agro-ecological practices	Agroecology training courses	Training courses in partnership with USSEIN	Specialty certificates in agroecology at CFPs	Financing training and integration	Monitoring and evaluation of information systems
V58	Building a farmers' seed industry	Community granaries in the communes	Collaboration with agricultural research institutions	Farmer seed production plots	Training in local seed production	Agreements with technical services
V59	Promotion and enhancement of agroecological products	Markets for agroecological products	Tax exemption for agroecological products	Value chains for agroecological products	Marketing plan for agroecological products	Certification of agroecological products
V60	Sustainable Land Management (SLM) programs	Training in Sustainable Land Management techniques	Provision of work equipment for producers	TDM implementation support	Sharing results and experiences	Monitoring and evaluation of TDM actions
V61	Territorial marketing strategy	National and international trade fairs	Digital platforms dedicated to agroecological products	Partnerships with hotels and restaurants	Ecotourism	Communication for territorial marketing
V62	Promotion of Products of Territorial Interest (PIT)	Capacity building for processors	Reinforced storage and preservation facilities	Support for standardized processing equipment	Formalizing and obtaining FRA authorization	Promoting local products
V63	Education in eco-responsible behavior	Advocating agroecology in sectoral programs	Revitalizing school environmental clubs	Supporting citizens' initiatives	Agroecology Day	Supporting behavior change
V63 (bis)	Education in eco-responsible behavior (continued)	Agroecology Awards				

	Land restoration		Promoting products of local interest
	Biomass regeneration		Integrating agroecology into public policy
	Access to productive water		

Innovation box ANALYSIS

The elements of the innovation box are analyzed here in order to identify and prioritize the actions and responsibilities to be undertaken for an agroecological transition in the Fatick department. To do this, we built and analyzed a database of 258 rows (one per option), and constructed three descriptive variables for the options: the category of actors responsible for an action (e.g. producers, communities), the type of action (e.g. training, advocacy) and the number of votes for each action (see Step 5).

Priority actions

In building the innovation box, participants proposed 19 action types (Figure 3), broken down according to the number of times they were cited:

- **Agroecological** and agroforestry **practices**, such as fertilizer plants, alternating strips or windbreaks,
- Capacity-building **training** for processors, farmers, livestock breeders and salt growers,
- **Awareness and information** campaigns targeting consumers, citizens, local elected representatives, farmers, forest managers and students.
- **Partnerships and contracts** aimed at ecologically intensifying production (e.g. parking contracts), unlocking resources (e.g. partnership between processors and financial institutions) and adding value to products.

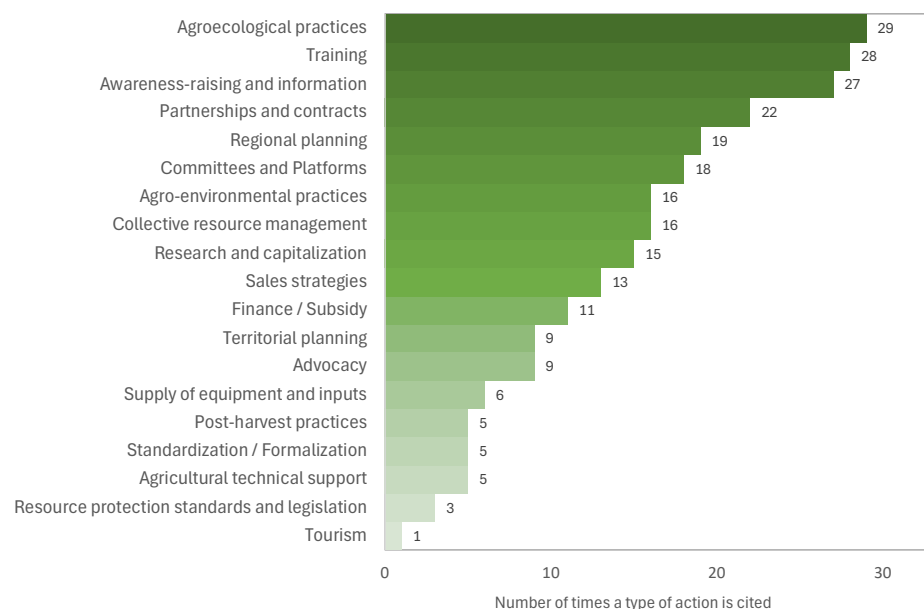


Figure 3: Ranking of 19 types of action according to the number of times they were entered in the innovation box (n=258)

- **Spatial planning** initiatives aimed primarily at protecting against salinization, securing the industry and ensuring water supply.
- Thematic **committees and platforms** (water, salt, forests, etc.) for consultation, monitoring, control and innovation.
- **Agri-environmental practices** to protect land against erosion, and to protect and manage forests.
- **Collective management of natural resources**, establishing rules for the protection, restoration and access to resources such as trees, water and seeds.
- **Research and capitalization** activities aimed at identifying needs, monitoring and evaluating public action, understanding market opportunities, and pooling agroecological knowledge.
- **Sales strategies** that aim to diversify sales channels, strengthen market presence via e-commerce and trade fairs, segment the offer, enhance the value of agroecological products through partnerships and digital platforms, while developing territorial communication and marketing.
- Actions to increase the **financial mobilization** capacity of actors (self-managed funds, voluntary contributions, solidarity guarantees, loans and pre-financing), to finance training and to exempt agroecological products from taxes.
- **Territorial planning** actions such as integrating agroecology into communal development plans and monitoring and harmonizing policies.
- **Advocacy** for the sustainable management of natural resources, green cities, increased subsidies for organic materials, the transfer of agricultural skills to local authorities, and education in eco-responsible behavior.

Innovation box

ANALYSIS

- **Equipment and inputs** supplied to farmers and processors, to improve their storage capacity and market access, reduce the drudgery of work thanks to mechanization, and acquire processing equipment that complies with standards.
- **Post-harvest practices** to improve forage quality and crop conservation, and develop alternative energy sources such as biogas.
- **Standardization/formalization** initiatives aimed at obtaining international certifications and authorizations, and labeling products of local interest, whether raw or processed.
- **Agricultural support** activities aim to promote ecological intensification of agriculture and livestock farming, encourage participatory innovation, support forage crops and green jobs, and support sustainable land management.
- **Standards and laws** designed to ensure sustainable management of forest resources by enforcing the forestry code, prohibiting illegal logging and rigorously complying with current legislation.
- **Ecotourism**, designed to make the region more attractive and provide outlets for local produce.

Actor responsibility

Figure 4 shows that to carry out the actions envisaged, participants most often pointed to the responsibility of producers and their organizations, local authorities, communities and their bodies (e.g. village committees), government services (e.g. water and forestry), the Fatick DyTAEL, NGOs, and an inter-profession that has yet to be built to add value to products.

Priority innovation avenues

In step 5 (see page 17), the experts voted to identify the action options to be integrated into their ideotypes. The results of this vote provide a visual indication of the priority innovation avenues in the eyes of local stakeholders. An analysis of Figure 5 shows that:

- The use of organic inputs, forage crops and farm-livestock integration are particularly popular innovation avenues, indicating that actors consider **organic matter recycling** to be a key priority.
- Strategies to enhance the value of products of local interest (marketing, labeling, commercial strategies, promoting local consumption) are high on the list, indicating the importance of **wealth production as a lever for transforming the region**.
- Policies/initiatives to combat land degradation (salinization, erosion) and sustainable forest resource management frameworks are given priority, revealing that local stakeholders are particularly committed to **land revitalization and biomass regeneration**.



Figure 4: Word cloud constructed by inferring word size from the number of times each type of actor is cited as carrying out an action.

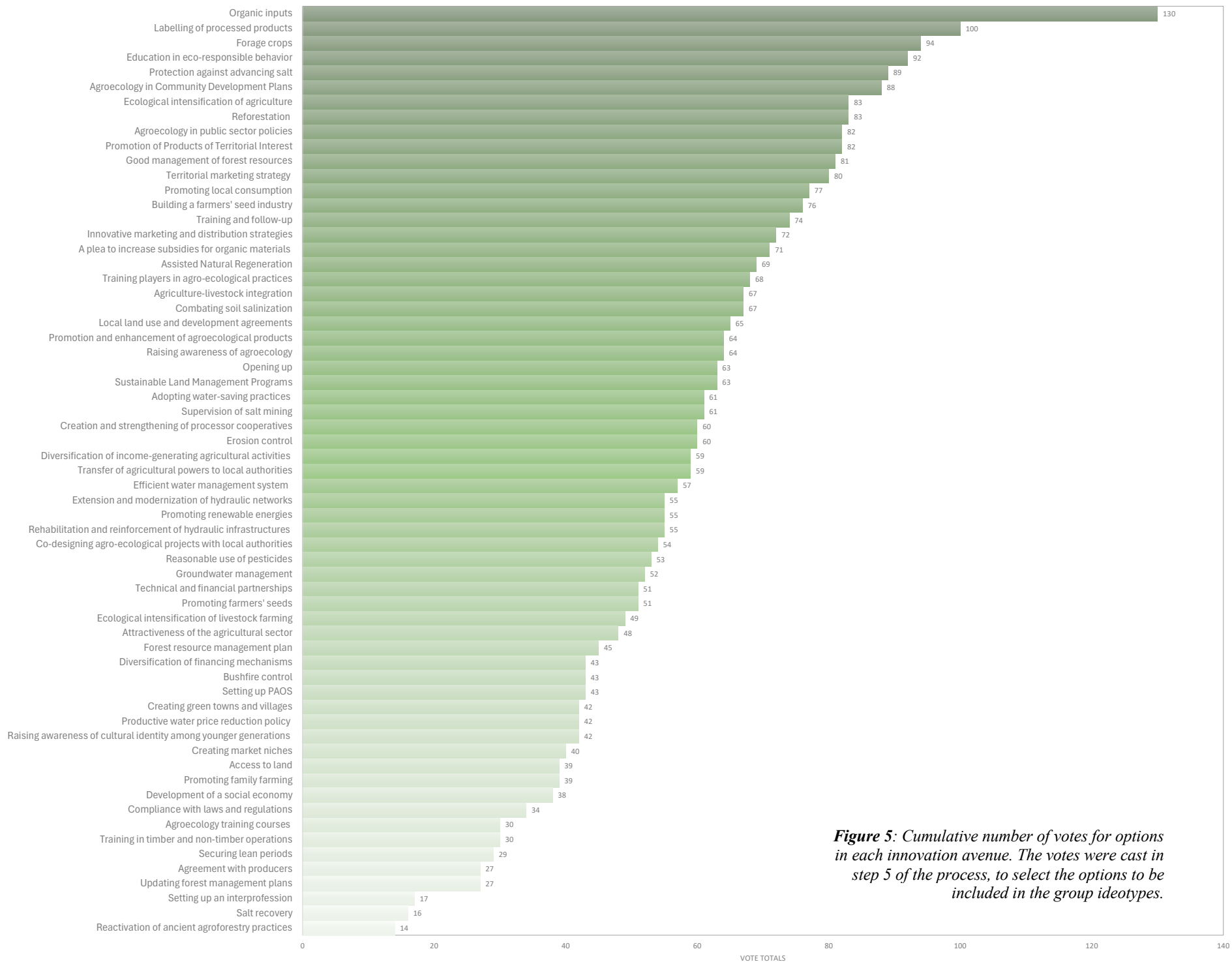


Figure 5: Cumulative number of votes for options in each innovation avenue. The votes were cast in step 5 of the process, to select the options to be included in the group ideotypes.

Step 5: Construction of ideotypes

On the morning of the fourth day, participants began **ideotyping**. They had been divided beforehand into 4 new groups containing representatives of the 5 groups from the first days of the workshop. The task of each group was to select and assemble elements from the innovation box to build an ideotype, i.e. a model of a territory that meets a specific purpose (see **box** below). The four ideotypes built by the groups took the form of global representations of the territory, the subsystems and actors that make it up (agriculture, support services, public policies, etc.), and their links (see **Figure 6** for an example).

Building ideotypes

Instructions for group work

Drawing on the Innovation Box, each group is tasked with building a single ideotype of a resilient, innovative territory to address the priority issues facing the Fatick department. The work is organized in 3 stages:

1/ Definition of the aims associated with the future ideotype. These goals may be agronomic, economic or societal in nature.

2/ Selection of options by individual vote by placing a mark in the boxes of the innovation box (40 min). The innovation box is a set of tables printed on A3 sheets, on which are represented the 5 leverage options identified for each innovation avenue. Once this stage has been completed, the result is photographed.

3/ Assembling the levers into an ideotype (40 min). To do this, cut out the selected levers and arrange them on the padex, associating them in groups and linking them with lines. Where possible, each line should be accompanied by a short text explaining the nature of the interaction between two levers.

4/ Naming the ideotype



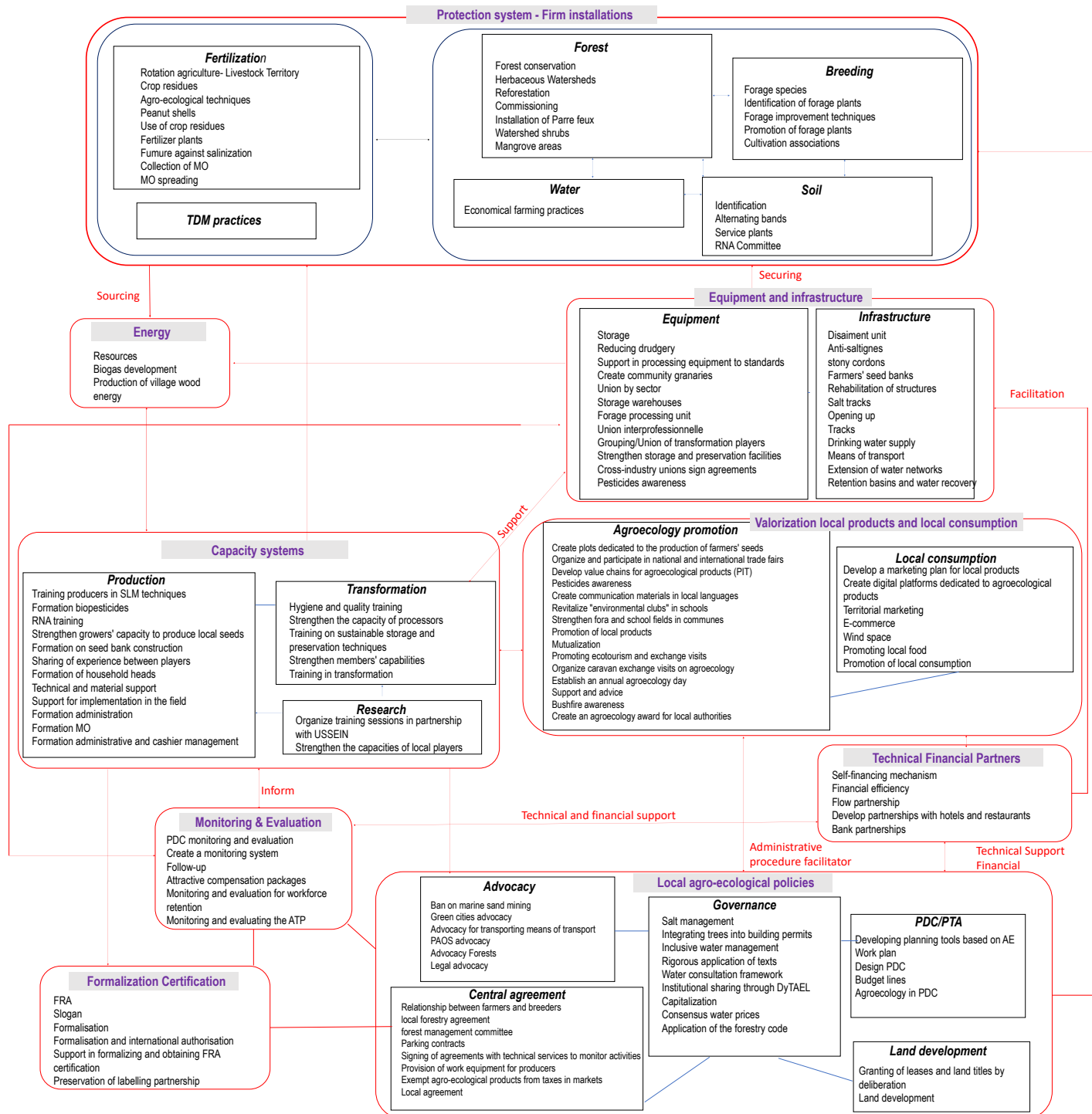


Figure 6: Ideotype built by one of the 4 groups. Digitization by Ibrahima Diallo.

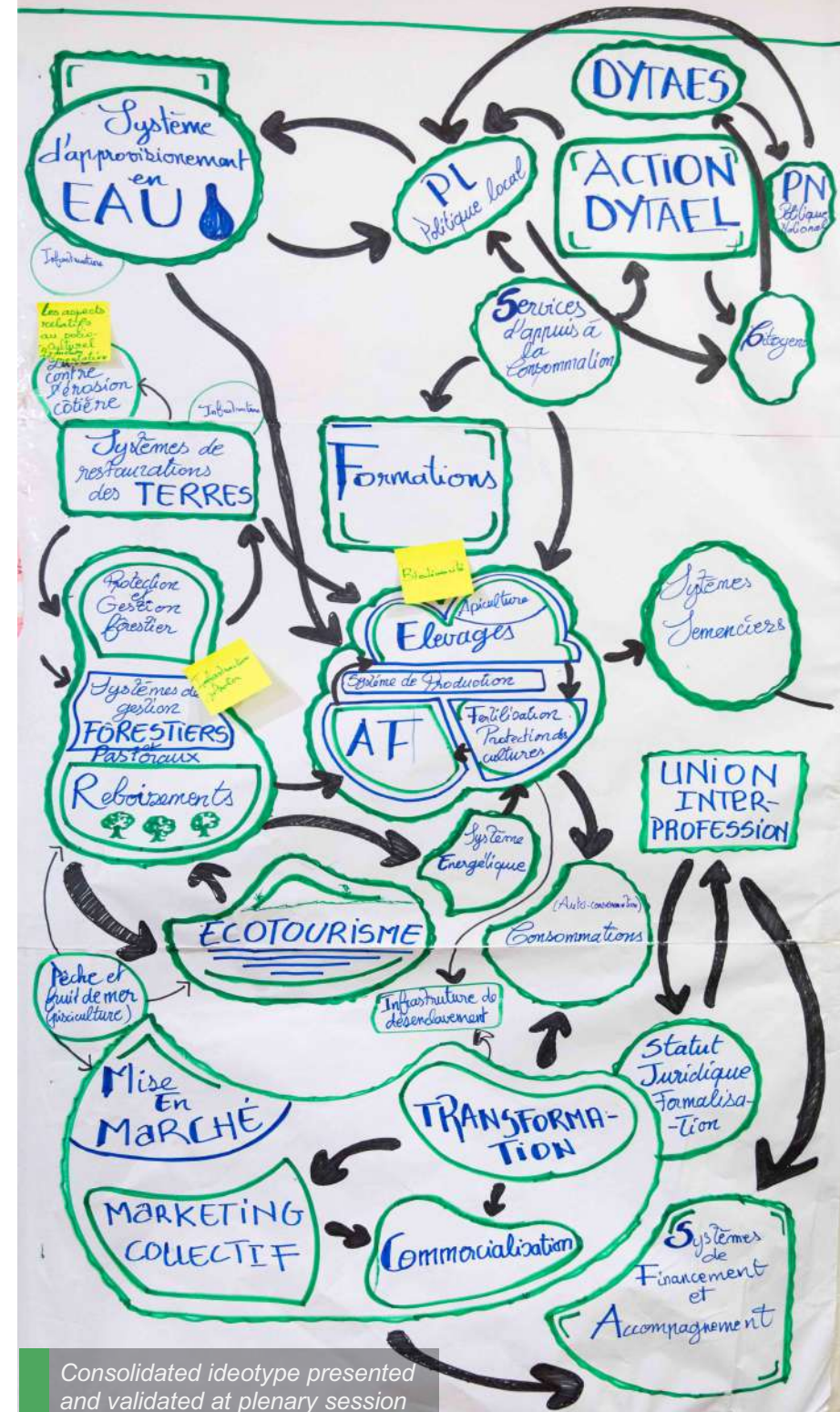


Photo: Restitution of the ideotypes built by the groups by a participant

Step 6: Building a consolidated ideotype

The day after the workshop, the 4 groups presented their ideotypes in plenary session, providing an opportunity for exchange and sharing. Immediately after the presentation, a pair presented the group with a draft of the merged ideotypes, so that all participants could increment and validate them. The merging process was as follows:

- i- **Identification of the sub-systems** that make up the ideotypes (see Table).
- ii- **Comparison of the 4 ideotypes.** A quick comparison of the ideotypes revealed that, with a few exceptions, the different groups used similar subsystems, while differing significantly in the degree of analytical breakdown and level of analysis of links between subsystems.
- iii- **Merging on a draft.** The fusion work consisted in identifying the most complete and best-organized ideotype (that of group 1) and reproducing and enriching it a draft padex using inputs from the analysis of the other three ideotypes
- iv- **Drawing of a first version.** The merged ideotype was cleaned up on a new padex, making sure to highlight sets, subsets and interactions.
- v- **Amendment and validation** by the group. In the plenary session, participants reviewed the merged ideotype and made a few minor changes.
- vi- **Stylization.** After the workshop, illustrator Victor Pied (Pigment company) produced a drawn version of the ideotype, visible below in the report.
- vii- **Building a narrative.** After the workshop, the elements of the innovation box were reorganized and used as the basis for the construction of a narrative text (see below).



Consolidated ideotype presented and validated at plenary session

Ideotype narrative

The elements of the innovation box were analyzed, reorganized and prioritized to build a narrative on the state of Fatick department by 2035. This narrative is enriched by illustrations.

In 2035, the Fatick department will have an integrated strategy for the sustainable management of natural resources, the agroecological transition of farms and the development of local products. This strategy is based on close collaboration between local authorities, government departments, DyTAEL, local communities, NGOs and technical and financial partners.

Access to water and sustainable management of water resources

Fatick has become a model of sustainable and equitable water resource management. Thanks to a series of ambitious initiatives launched by local authorities in partnership with technical and financial actors, the department has succeeded in ensuring physical and economic access to productive water in sufficient quantity and quality for all.

To guarantee equitable and sufficient access to productive water, the department has set up **hydraulic infrastructures** such as rainwater retention basins, marine water desalination units, and the extension of water distribution and transfer networks. These initiatives, led by local authorities in partnership with technical and financial partners, ensure the availability of quality water throughout the region, including the most remote and arid areas.

To optimize water use while maintaining high agricultural yields, farmers in Fatick have adopted **water-saving practices** such as drip irrigation, mulching and trough cultivation. Local authorities and associations of borehole users (ASUFOR) have set up a **framework** inclusive and sustainable water management. This framework has led to a consensus to reduce the price of water, thus easing the economic burden on local communities.

Restoring degraded land and climate resilience

Fatick is also a leader in restoring degraded land and combating the effects of climate change. Local stakeholders have achieved this by focusing their efforts on three major threats: erosion, salinization and retreating coastlines.

To **prevent** wind and water **erosion** and improve soil fertility, communities have installed stone barriers, planted shrubs and herbaceous plants, and conserved crop residues. A network of anti-salt dykes has been built by the State, NGOs and various partners to **halt the advance of salt** in the salt valleys and along the coastal strip. In affected areas, reforestation campaigns, including local halophyte species and mangroves, have been carried out to restore terrestrial and marine ecosystems. To **recover saline soils**, farmers have also mobilized, using techniques such as spreading organic manure, groundnut hulls and phosphogypsum on their plots.

To **protect the coastline**, local authorities have banned the exploitation of marine sands and rigorously enforced environmental laws with the participation of coastal municipalities and Marine Protected Areas. These combined efforts have contributed to land regeneration, the return of biodiversity and greater resilience of Fatick's agro-ecosystems to climate change.

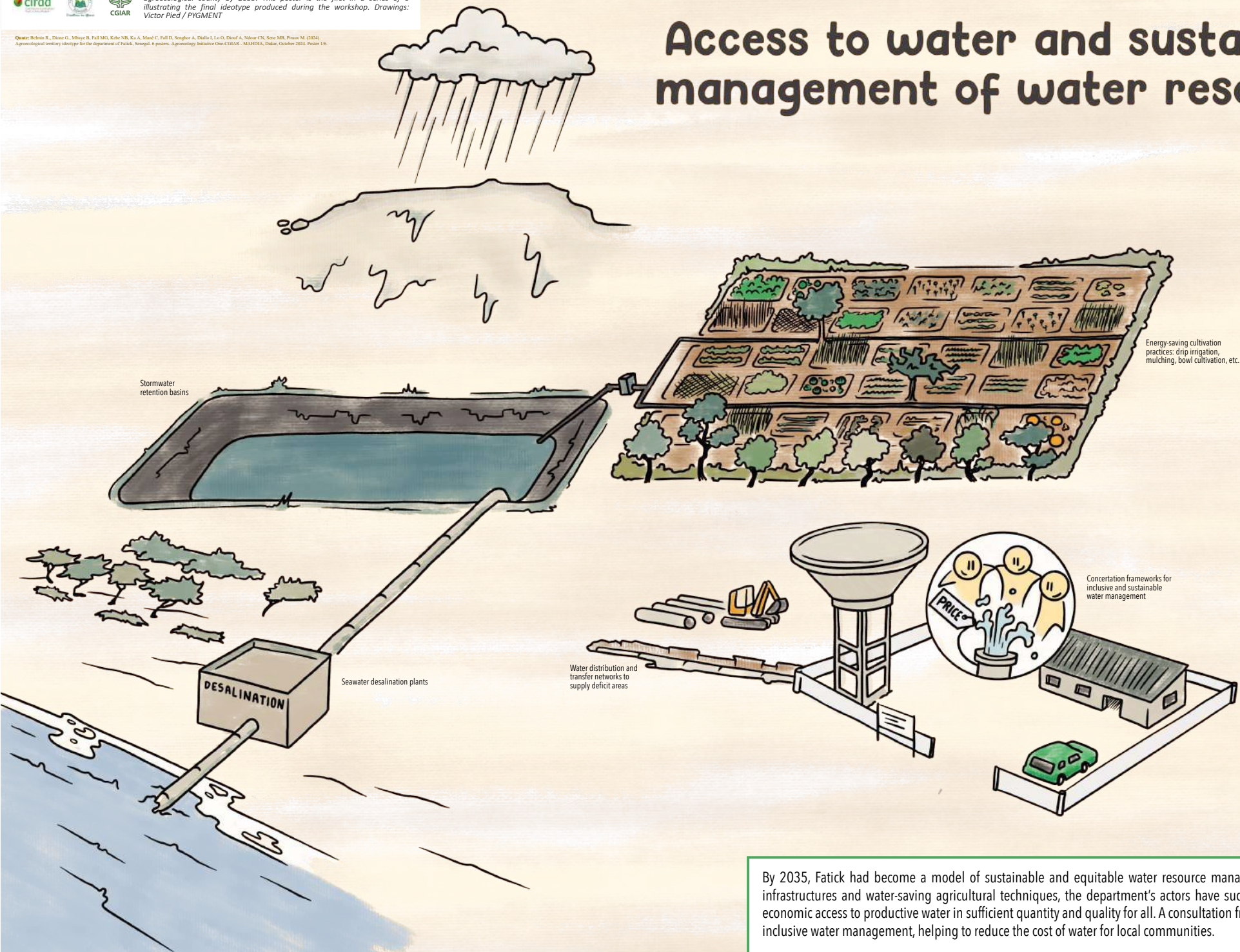
Access to water and sustainable management of water resources



From 02 to 06 September 2024, the Dynamique pour une Transition Agroécologique Locale (DyTAEI) in Fatick and its scientific partners organised an ideotyping workshop in Palmarin. For five days, some fifty experts pooled their knowledge to co-design an ideotype of a resilient and innovative agroecological county by 2035. This poster is the first in a series of 6 illustrating the final ideotype produced during the workshop. Drawings: Victor Pied / PYGMENT



Quote: Bohun R., Dione G., Mbaye B., Fall M.G., Khe N.H., Ka A., Madi C., Fall D., Sanghor A., Diallo L., Lo O., Diouf A., Ndour C.N., Sene M.B., Pissin M. (2024). Agroecological territory ideotype for the department of Fatick, Senegal. 6 posters. Agroecology Initiative One-CGIAR - MAJHDA, Dakar, October 2024. Poster 1/6.



By 2035, Fatick had become a model of sustainable and equitable water resource management. By combining hydraulic infrastructures and water-saving agricultural techniques, the department's actors have succeeded in ensuring physical and economic access to productive water in sufficient quantity and quality for all. A consultation framework has also been set up for inclusive water management, helping to reduce the cost of water for local communities.



From 02 to 06 September 2024, the Dynamique pour une Transition Agroécologique Locale (DyTAL) in Fatik and its scientific partners organised an ideotyping workshop in Palmarin. For five days, some fifty experts pooled their knowledge to co-design an ideotype of a resilient and innovative agroecological county by 2035. This poster is the second in a series of 6 illustrating the final ideotype produced during the workshop. Drawings: Victor Pied / PYGMENT



Quote: Behnia R., Dione G., Mbaye B., Fall MG, Kbe NB, Ka A., Moud C., Fall D., Sanghor A., Diallo I., Lo O., Diouf A., Nkour CN, Sene MB, Pinaux M. (2024). Agroecological territory ideotype for the department of Fatik, Senegal. 6 posters. Agroecology Initiative Oae-CGIAR - MAHIDA, Dakar, October 2024. Poster 2/6.

Restoring degraded land and climate resilience

2/6

Shrubs and stone barriers to prevent wind and water erosion and improve soil fertility

Spreading organic fertilizer, peanut shells and phosphogypsum to reclaim saline soils

Network of anti-salt dykes in salt valleys and along the coastal strip

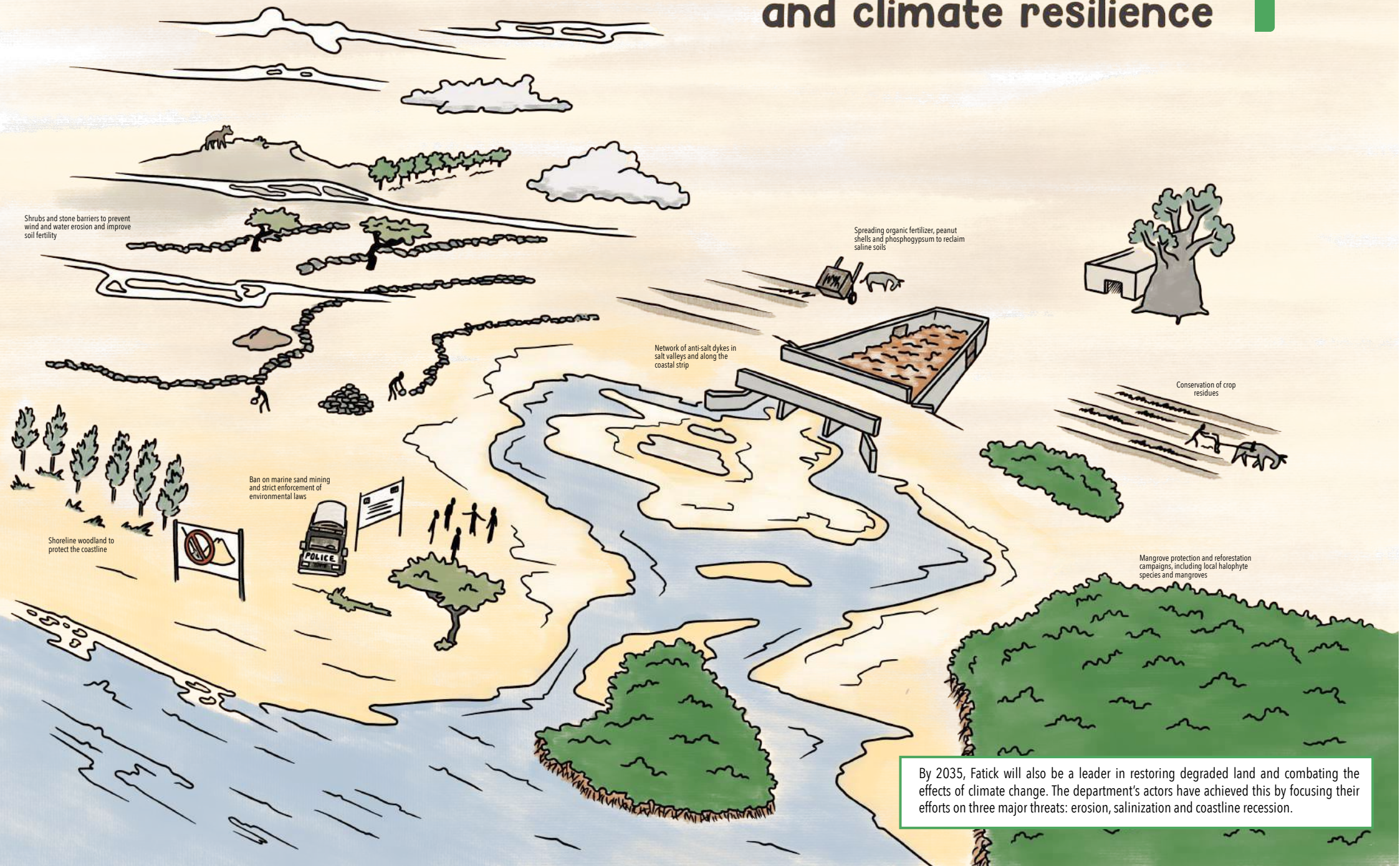
Conservation of crop residues

Ban on marine sand mining and strict enforcement of environmental laws

Shoreline woodland to protect the coastline

Mangrove protection and reforestation campaigns, including local halophyte species and mangroves

By 2035, Fatik will also be a leader in restoring degraded land and combating the effects of climate change. The department's actors have achieved this by focusing their efforts on three major threats: erosion, salinization and coastline recession.



Ideotype narrative

Sustainable management of forest and grazing resources

In 2035, the Fatick department will be distinguished by exemplary management of its forest and pastoral resources, the fruit of collective mobilization and rigorous planning.

The department's land has been extensively reforested thanks to collaboration between state services, local communities and NGOs. These actors worked together to install windbreaks in fields and public spaces, and to set aside certain areas for natural regeneration. The trees planted have taken root well, thanks to a careful selection of species adapted to local soils and conditions, such as *melifera*, *niawli*, eucalyptus and various fruit trees.

Assisted Natural Regeneration (ANR) has become a common practice, where young trees are identified, marked and maintained by communities. An RNA committee made up of producers, local authorities and water and forestry officials oversees these efforts, guaranteeing ongoing support and monitoring of the populations. RNA training courses, provided by technical services and NGOs, have enabled farmers to acquire the skills needed to effectively maintain the trees.

Public awareness campaigns on sustainable forest management have resulted in strict application of the forestry code by communities. Training courses on **good practice in the use of** timber and non-timber resources are provided on a regular basis, covering respectful, non-destructive cutting and gathering techniques. In the **fight against bush fires**, the Water and Forestry Service relies on village committees and NGOs to install firebreaks, set controlled early fires every year, and organize awareness campaigns in high-risk areas.

To reforest urban areas, local authorities and their partners have created "**green towns and villages**". In the areas affected by this policy, awareness has been raised through conferences, meetings and ceremonies, and local planning departments have incorporated this requirement into building permits, obliging owners to plant trees or compensate for any destruction by reforestation.

To reduce dependence on forest resources, the Fatick department has widely adopted **renewable energies and energy efficiency**, in particular with the development of biogas and the adoption of improved stoves. Local communities now produce their own village-grown wood fuel, in particular through the fencing of groves.

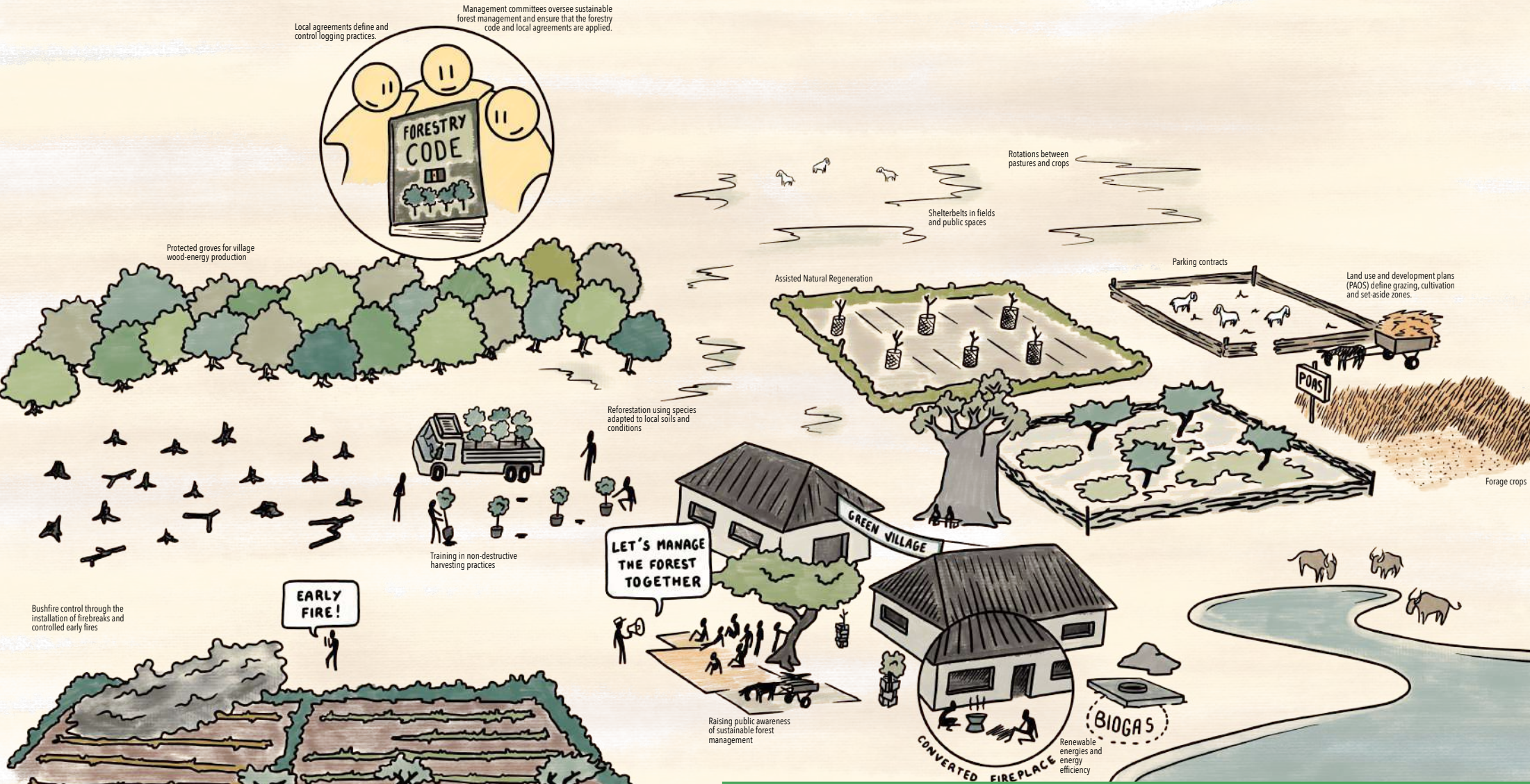
These achievements are the result of **multi-level governance** of forest and pastoral resources. At commune level, local conventions co-constructed with local populations define and control forestry practices, while Land Use and Allocation Plans (POAS) define grazing, cultivation and set-aside zones. At communal and departmental level, management committees oversee sustainable forest management and ensure that local agreements are applied.



From 02 to 06 September 2024, the *Dynamique pour une Transition Agroécologique Locale (DyTAE)* in Fatick and its scientific partners organised an ideotyping workshop in Palmarin. For five days, some fifty experts pooled their knowledge to co-design an ideotype of a resilient and innovative agroecological county by 2035. This poster is the third in a series of 6 illustrating the final ideotype produced during the workshop. Drawings: Victor Pied / PYGMENT



Sustainable management of forest and grazing resources



In 2035, the Fatick department stands out for its exemplary management of forest and pastoral resources. Land, towns and villages have been reforested thanks to collaboration between communities, state services and NGOs. Thanks to renewable energies and energy efficiency, populations have reduced their dependence on forest resources. Local conventions and land use plans structure the use and protection of forest and pastoral resources.

Ideotype narrative

Agroecological transition and agriculture-livestock integration

By 2035, farmers and stockbreeders in the Fatick department have successfully completed their agroecological transition, thanks to the ongoing support of government technical services, NGOs and research institutes. Farmers have adopted a wide range of techniques aimed at **ecologically intensifying cropping systems**, such as crop associations, fertilizer plants, composting, manure, mulching, zaï and organic fertilizers. These practices have improved soil fertility while reducing dependence on chemical inputs. The use of **organic inputs** has become widespread in the department, thanks to agriculture-livestock coupling and organic fertilizer distribution policies. Manure and compost are collected and spread to improve degraded soils. The use of liquid biofertilizers, green manures and beneficial indigenous micro-organisms (BAMs) has spread, supported by training provided by technical services and other partners. These various agronomic levers have improved soil fertility while reducing dependence on chemical products.

The integration of agriculture and livestock farming has been made possible by parking contracts and organized rotations between pastoral and crop-growing areas, introduced following workshops bringing together farmers and livestock breeders. It has also been facilitated by the use of fodder crops and improved animal breeds. This collaboration and these innovations have strengthened the relationship between these two activities, enabling more efficient and sustainable land use.

Chemical pesticides are used in a reasoned manner, and are gradually being replaced by locally manufactured biopesticides and service plants capable of combating bio-aggressors. Local authorities,

in collaboration with health workers and technical services, have set up control committees to ensure compliance with regulations on pesticide use, thus guaranteeing a healthy environment for crops and communities.

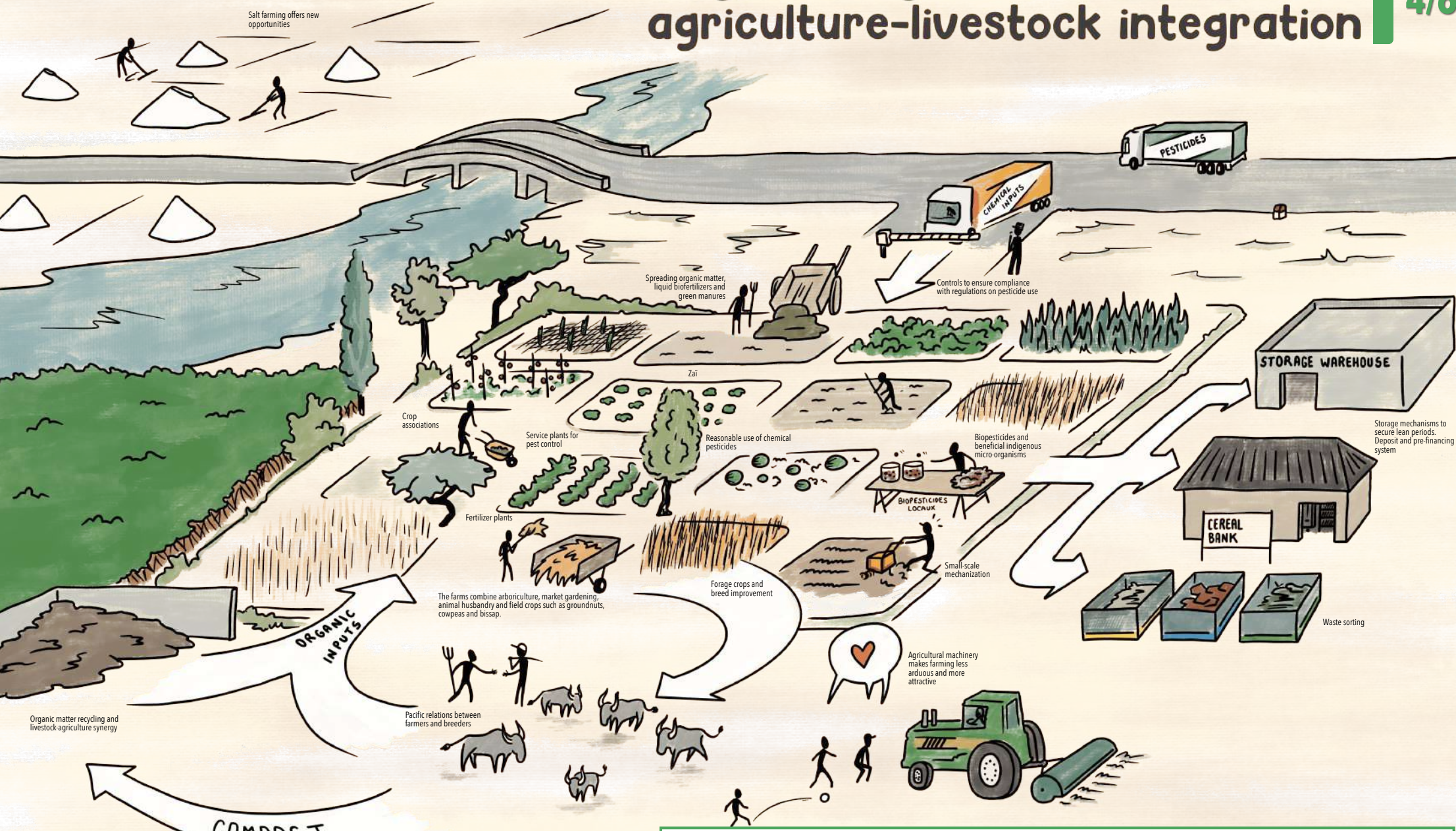
Crop diversification is also driving the agroecological transition for farms in the department. Family farms in Fatick now combine arboriculture, market gardening, animal husbandry and field crops such as groundnuts, cowpeas and bissap. At the same time, salt farming is opening up new opportunities for the department's rural population. Agriculture has become an attractive activity for young people, thanks to the provision of **agricultural machinery** (tractors, power tillers, harvesters) to ease the arduous workload.

Faced with the challenges of food security, producers have set up **storage mechanisms** to secure the lean periods, keeping surplus production in storage warehouses and cereal banks. A deposit and pre-financing system has been integrated to avoid selling off harvests, supported by ORSRE and the Ministry of Commerce.

Promoting local products and economic development

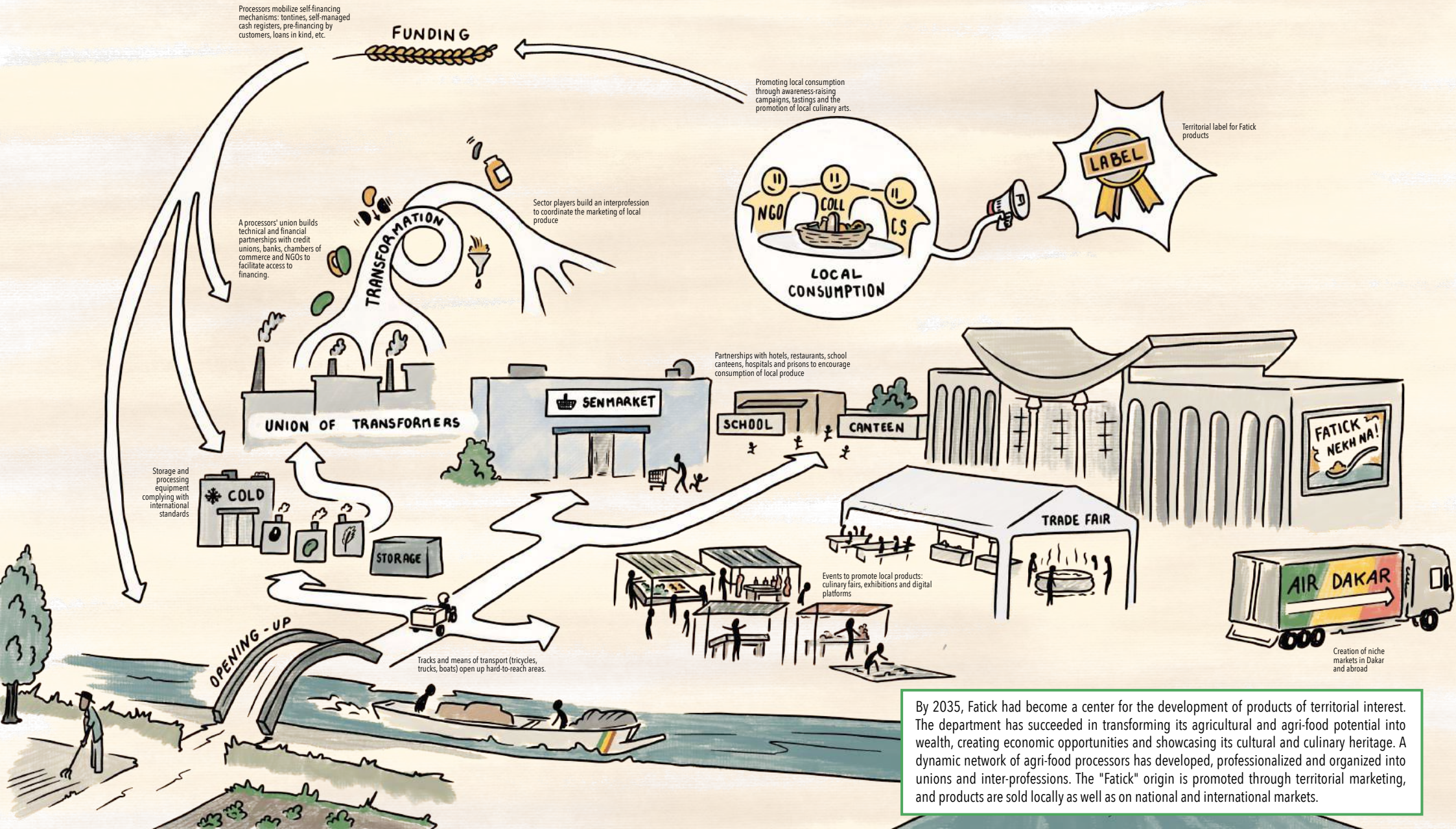
By 2035, Fatick has become a center for the valorization of products of territorial interest, thanks to an inclusive and collaborative development strategy involving civil society, local authorities and NGOs.

Agroecological transition and agriculture-livestock integration



By 2035, farmers and livestock breeders in the Fatick department had successfully completed their agroecological transition, thanks to ongoing support from government technical services, NGOs and research institutes. Producers have diversified their farms, and adopted a wide range of techniques and equipment aimed at ecologically intensifying cropping systems and coupling agriculture and livestock. Storage mechanisms provide security during lean periods, and a system of deposits and pre-financing ensures that harvests are valorized.

Promoting local products and economic development



By 2035, Fatick had become a center for the development of products of territorial interest. The department has succeeded in transforming its agricultural and agri-food potential into wealth, creating economic opportunities and showcasing its cultural and culinary heritage. A dynamic network of agri-food processors has developed, professionalized and organized into unions and inter-professions. The "Fatick" origin is promoted through territorial marketing, and products are sold locally as well as on national and international markets.

Ideotype narrative

The region has transformed its agricultural and agri-food potential into wealth, creating economic opportunities and showcasing its cultural and culinary riches.

At the heart of this transformation is a dynamic network of **agri-food processing companies**, which have managed to professionalize thanks to an ambitious government training policy. Processors have been trained in hygiene and quality, processing and preservation techniques, and administrative and financial management by the Institut de Technologie Agro-alimentaire in collaboration with NGOs and technical partners. Professionalization is also supported by the State, NGOs and the Fonds de Financement de la Formation Professionnelle et Technique (3FPT), which provide **processing equipment** that meets international standards (grinders, baggers, dryers, etc.).

Processors have organized themselves into a cooperative called **Union des transformateurs**, which plays a key role in organizing and structuring the sector. It provides training for its members and develops technical and financial partnerships with credit unions, banks, chambers of commerce and NGOs to facilitate **access to financing** and improve the competitiveness of local products on the market. In addition, other solidarity-based financing mechanisms are mobilized (tontines, self-managed funds, pre-financing by customers, loans in kind), contributing to the **financial autonomy** of processing units.

An **interprofession** has been set up to **coordinate the marketing of** local produce. This interprofession brings together producers, processors and buyers, and operates with the support of municipalities and NGOs. The interprofession has set up a territorial marketing program for Fatick products, based on events, culinary fairs,

exhibitions and digital platforms. The interprofession is also establishing partnerships with hotels, restaurants, school canteens, hospitals and prisons to encourage consumption of local products. To conquer new markets, the interprofession is focusing on segmentation strategies and the creation of domestic and export market niches. Quality control and **labeling** of processed products such as local cereals, market garden produce and fish products, reinforces their added value and recognition on national and international markets. Finally, the department promotes **local consumption** through awareness-raising campaigns, culinary tastings and the promotion of local culinary art.

Territorial planning and integrating agroecology into public policies

In 2035, the department of Fatick will be a model of territorial planning that fully integrates agroecology. This status is the result of the joint work of local authorities and DyTAEL, ensuring that each initiative is built in relation to a single vision for the agroecological transition.

Fatick's DyTAEL has engaged in dialogue and provided support to local authorities and decentralized government departments, leading to **the integration of agroecology into territorial public policies**. The DyTAEL was deployed in all the department's communes, building the capacities of elected representatives and supporting the preparation of Communal Development Plans (PDC) and Departmental Development Plans (PDD). Fatick's DyTAEL interacts closely with DyTAES, which carries out similar work at national level. Specific planning tools and monitoring mechanisms are put in place by the Regional Development Agency, ensuring that **sectoral policies** are aligned with agroecological objectives. DyTAEL is also

Ideotype narrative

building a **framework for concerted action** to inventory, coordinate and harmonize the efforts of all actors involved in agroecology.

To **open up** hard-to-reach areas, municipalities, NGOs and inter-professional organizations have worked together to build transport tracks and provide means of transport (tricycles, trucks, boats) for agricultural and salt production actors. Storage infrastructures, such as cold rooms and storage areas, have also been delivered to strengthen value chains.

To guarantee **equitable access to land**, land policies have been implemented, with leases and land titles granted by deliberation. In the same vein, local land-use agreements have been set up to establish clear zoning between saliculture, forestry, livestock and agricultural activities.

The department **supports family farming** under the slogan "one family, one agroecological farm". To strengthen the skills of young farmers, it offers training in agroecology at vocational training centers and regional universities, with financial support for structures such as 3FPT, ONFP and PF2E. To make agricultural jobs less risky and more attractive, the Department has signed partnership agreements with banks and NGOs, guaranteeing attractive wages and social protection for workers. This policy has encouraged each family to maintain its farming and adopt agroecological practices

Building a **farmers' seed industry** has also been a key aspect of this policy. Local authorities, in collaboration with research institutions, have developed seed banks while supporting the production of certified local seeds. They have also set up **forage processing units** to boost local availability of this key resource and create new green jobs.

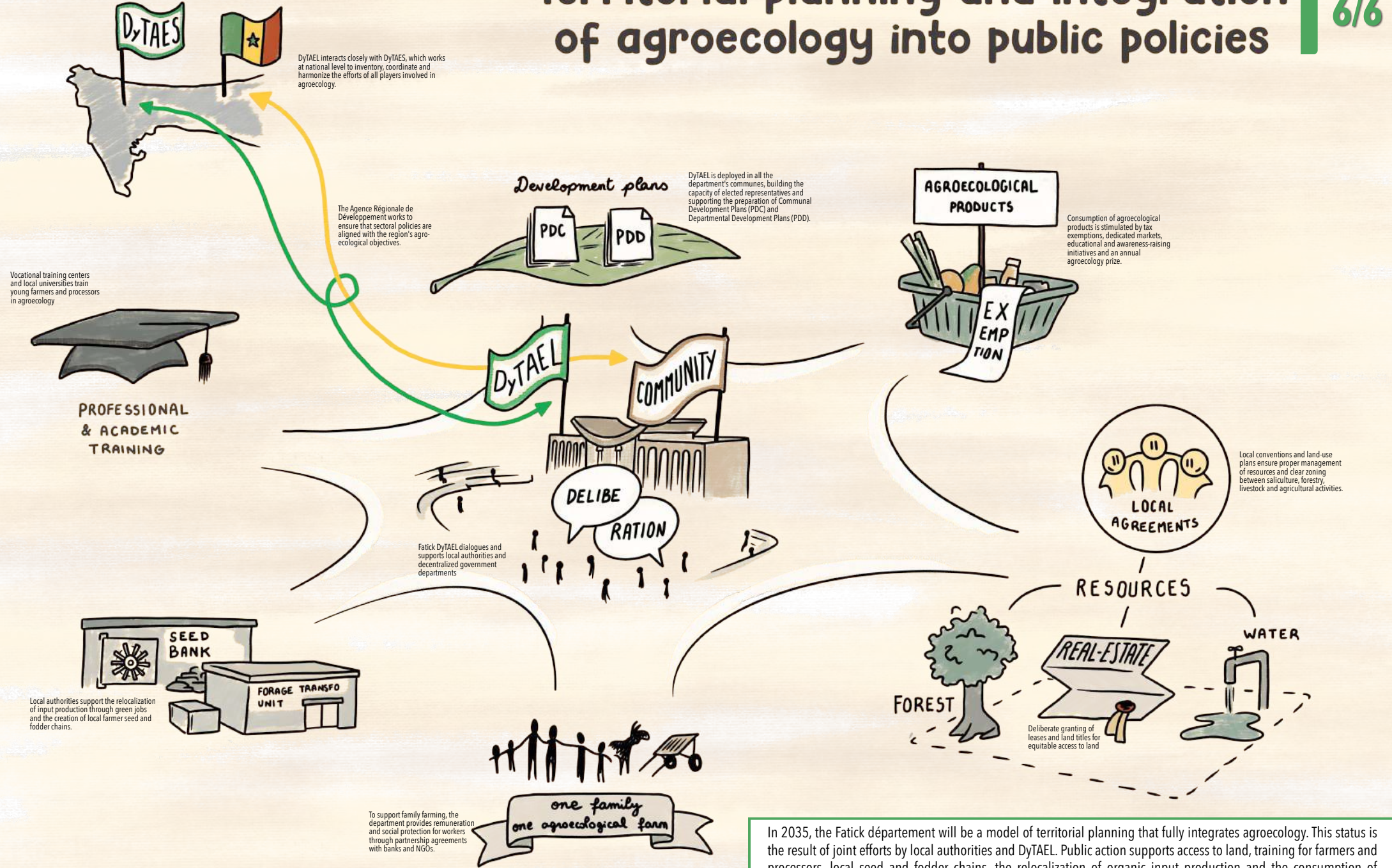
Lastly, the Department has supported the **consumption of agroecological products** through tax exemptions and the creation of dedicated markets. Educational and awareness-raising initiatives on eco-responsible behavior are carried out in schools and communities, with annual agroecology awards.

Conclusion

By 2035, Fatick has established itself as a model department for sustainable development, combining agroecological transition, environmental resilience, economic growth and social inclusion. Thanks to its innovative and collaborative management of resources, the department provides inspiration for other regions of Senegal and sub-Saharan Africa facing the challenges of climate change and food security.

Quote: Bélimin R., Dioue G., Mbaye B., Fall MG., Kébe NI., Ka A., Masi C., Fall D., Senghor A., Diallo J., Lo O., Diouf A., Niour CN., Sene MB., Penou M. (2024). Agroecological territory ideotype for the department of Fatick, Senegal. 6 posters, Agroecology Initiative One-CGIAR - MAHDA, Dakar, October 2024. Poster 6/6.

Territorial planning and integration of agroecology into public policies



In 2035, the Fatick département will be a model of territorial planning that fully integrates agroecology. This status is the result of joint efforts by local authorities and DyTAEL. Public action supports access to land, training for farmers and processors, local seed and fodder chains, the relocalization of organic input production and the consumption of agroecological products.

Field visit

On the sidelines of the ideotyping workshop, members of Fatick's DyTAEL visited the Kaydara school farm. "Kaydara" is an innovative agroforestry farm covering 7 hectares in the arid, salty Sine Saloum region of western Senegal. Kaydara's founder is Gora Ndiaye, a visionary who devised an intelligent, economical and productive farming system. Under the benevolent shade of coconut palms, nurseries, fruit trees and market garden crops are planted.

Every year, the Kaydara farm trains hundreds of young people from all over Senegal and the sub-region in a 6-month agroforestry course. At the end of their course, they return home with a wealth of knowledge and a few coconut tree plans, to set up their own farm. Kaydara is living proof that agroecology is a viable and enviable option for the Sahelian zone. A real source of inspiration for the members of the Fatick DyTAEL and for the ideotyping work.





Photo: Participants in the ideotyping workshop visit the Kaydara farm.

Workshop summary and outlook

At the end of a 5-day workshop in Palmarin, from September 2 to 5, 2024, the One-CGIAR Agroecology Initiative and MAHDIA project teams have broadly **achieved the objectives** set, namely:

- (i) The root causes and consequences Fatick department's priority problems were analyzed.
- (ii) A directory of 258 solutions, levers and innovations to address these issues has been compiled.
- (iii) An ideotype of an agroecological, resilient and innovative territory was designed from this same repertoire. This ideotype was presented in the form of an illustrated narrative.
- (iv) Inspiring insights and experiences were shared to fuel participants' thinking;

At the closing ceremony and subsequent press briefings, representatives of DyTAEL and the Fatick department affirmed their joint willingness to use the ideotype to inform DyTAEL's ten-year strategic planning. The ideotype will be presented at the national DyTAES-DyTAEL 2025 caravan, and will serve as a compass to guide policy dialogue between DyTAEL, local authorities and government departments.

Support projects

The workshop was supported by two projects jointly run by CIRAD and ISRA in collaboration with DyTAEL in Fatick.

The aim of the one-CGIAR **Agroecological Initiative (AEI)** is to provide evidence of the transformative nature of agroecology and its ability to bring about a global reconfiguration of agri-food systems. Built up via a similar approach in seven fields across the Global South, the knowledge acquired by the AEI will feed into the construction of reproducible models to support the agroecological transition. AEI's **Work Package 5 (WP5)** specifically aims to gain a better understanding of the mechanisms underpinning agroecological transitions, in order to guide the work of scientists, donors, policy-makers and other actors involved in supporting change.

The **MAHDIA project** (Mêler agroécologie et résilience hydrique pour des systèmes alimentaires durables en Afrique - Combining agroecology and water resilience for sustainable food systems in Africa) aims to design and implement a participatory approach to developing territorial platforms that bring together the various actors in the food systems of the application territories: farmers, processors, distributors, restaurateurs, local authorities, right through to consumers. To this end, the project is based on the notion of a "**product of territorial interest**", linking agricultural, food, environmental, cultural and health issues. The first workshop of the MAHDIA-Senegal project highlighted millet, rice, salt, cowpeas and vegetables as the four main products of territorial interest for the Fatick department.

Methodological review

Ideotyping innovative agricultural systems is a **visioning method** developed and tested by CIRAD and its partners in West Africa since 2021. This approach is designed to engage groups in the construction of a mental image of an ideal that does not exist in reality, but which could be achieved through concrete actions. The first ideotyping experiments were conducted in Senegal and Côte d'Ivoire as part of workshops for the co-design of cropping systems (Belmin et al. 2022; Mboh et al 2021; Triomphe et al. 2023), farms (Belmin et al 2023; Ouedraogo et al. 2024) and food systems (Belmin et al 2023; Deletré et al. 2024). With the Palmarin workshop, the ideotyping method has reached a new stage of deployment. This new adaptation experience enables us to **assess the flexibility and robustness of the method** in the face of new questions and new objects to be designed. In the following lines, we review the methodological evolutions introduced during this workshop, and draw some critical discussions.

Territory ideotyping - In Fatick, the ideotyping method was extended for the first time to the scale of the "territory" object. This broadening of the scope of the designed object posed no methodological or conceptual difficulties for the participants and facilitators. It produced ideotypes that emphasized the management of natural and productive resources (water, trees, land).

Integration of stakeholders into the workshop team - Three of the pillars of the Fatick DyTAEL were integrated into the workshop team. Their role was decisive in the choice of invited experts, the mobilization of stakeholders and the dissemination of results.

Targeting priority issues - In previous experiments, the choice of issues guiding the causal analysis was made in plenary session. In the case of Fatick, the choice was made beforehand, and was largely based on the strategic objectives of the Fatick DyTAEL.

Time horizon - Based on a foresight exercise carried out 2 years earlier by CIRAD in Fatick, participants defined a 10-year time horizon for the ideotype (2035). This time frame was useful.

Workshop duration - The workshop was conducted over 5 days instead of the usual 3. This longer format was designed to give participants time to carry out some of the key steps themselves, and to take some time out. In particular, it enabled (1) the problem trees to be studied in greater depth and presented in plenary session (first day); (2) participants to be left in charge of identifying their own innovation avenues based on the solution tree (this was done by the researchers in the previous workshops) (second day); (3) to take participants on a field visit to an agroecological farm (third day) and (4) to construct the ideotypes on the fourth day, and for the fifth day, to share/merge these in plenary and then finish with an evaluation of the workshop and a closing ceremony. Despite the overall satisfaction of the participants, they suggested to the facilitation team that this type of workshop be made less dense by spreading the work over two weeks instead of one.

Problem trees - Problem trees were also enriched at the Palmarin workshop. Not only were they built downwards for causal analysis, but also (novelty) upwards for consequence analysis. This variation led to a better analysis of the economic, social and environmental consequences of the basic problems, and opened up new avenues for innovation. The problem trees were presented in plenary session, to encourage exchanges between groups and a cross-cutting approach.

Solution trees - These were constructed by gluing green post-it notes directly onto the problem trees (orange or pink post-it notes). Problem trees thus become solution trees, whose hierarchical organization can in some cases facilitate the identification of innovation avenues.

Identifying innovation avenues - This stage proved tricky in some groups. It only worked well when the facilitators had a clear understanding of the notion of innovation avenues, which implies a capacity for increasing genericity

Building the innovation box - Two changes were made here. The first was to clarify the ontological status of Options 1-5. These were presented to participants as (i) complementary actions; (ii) substitutable actions; (iii) successive actions. The second change was to ask participants not to limit themselves to a few key words, but to write sentences of the following type: (Who)(Does what)(How)(Where). The "why" is normally the title of the track.

Selecting options - As the groups stalled at the selection stage, we changed the way options were selected. Participants were instructed to read the whole box individually, marking with a black line the options they felt had priority. The most frequently marked options were then mechanically selected, and the others were put up for discussion before being rejected or picked out. This method of selection by vote enabled the innovation box to be properly appropriated, accelerated the selection process and, what's more, opened up opportunities for statistical analysis of the innovation box.

Assembling options - In the absence of experienced facilitators, this phase was very difficult. The groups tended to group options together without making any fine distinctions (e.g.: a potato with 40 options named "policy", with lots of errors inside). The coordinators managed to unblock the situation: (1) by asking the groups to resume their work

in an iterative fashion, seeking to refine each group of post-it notes; (2) by taking the animation lead in certain groups.

Merging ideotypes - The merged ideotype was constructed on the morning of the fifth day by a participant previously briefed by the coordinator, then presented, edited and validated in plenary. This merging stage with the participants is new and promising. In previous ideotyping workshops, it was the researchers themselves who carried out the post-workshop merging.

Field visit to an agroecological farm - This half-day airing was absolutely vital in such a dense workshop; it was also a source of inspiration for understanding the link between vision and realization.

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APPENDICES

Detailed procedure

Opening hours	Activities	Managers
Sunday 01/09		
17:00	Bus from Fatick to hotel in Djiffer	
18:00	Reception of participants and rooms	Hotel
19:00	Briefing meeting	Animation team
Monday 02/09		
09:00 - 10:00	Welcoming participants	
10:00 - 10:20	Opening ceremony	Mame Birame Sene (DyTAEL) Modou Gueye Fall (ISRA) Raphael Belmin (CIRAD) Mamadou Dicko Ndiaye (Fatick Departmental Council) Oumy Yandé Sarr (Palmarin Town Hall)
10:20 - 11:00	Workshop objectives and schedule	Coumba Ndoffène (DyTAEL)
11:00 - 11:30	Presentation of the ideotyping process	Raphael Belmin
11:30 - 12:00	<i>Coffee break</i>	
12:00 - 14:00	<i>work</i> Building the problem tree	Animation team
14:00 - 15:00	<i>Lunch break</i>	
15:00 - 16:00	<i>work</i> (Continued)	Animation team
16:00 - 17:00	Feedback and discussion	Group rapporteurs
17:00 - 18:00	Debriefing of the animation team	Monitoring and evaluation team
Tuesday 03/09		
09:00 - 10:30	Sharing inspiring experiences - CAREM reforestation project - Kamyak Ecovillage	Idrissa Sene (CAREM) Mouhammad Djibril Gaye and Abibatou Barry (Kamyak)
10:30 - 11:30	<i>work</i> Building a tree of innovative solutions	Animation team
11:30 - 12:00	<i>Coffee break</i>	
12:00 - 14:00	<i>work</i> (continued)	Animation team
14:00 - 15:00	<i>Lunch break</i>	
15:00 - 17:00	<i>work</i>	Animation team

	Grouping solutions into innovation avenues	
17:00 - 18:00	Debriefing of the facilitation team + consolidation of innovation avenues	Animation team
Wednesday 04/09		
09:00 - 11:30	<i>work</i> Building the innovation box	Animation team
11:30 - 12:00	<i>Coffee break</i>	
12:00 - 14:00	<i>work</i> (Continued)	Animation team
14:00 - 15:00	<i>Lunch break</i>	
15:00 - 19:00	Visit to the Kaydara school farm	Gora Ndiaye (Kaydara)
19:00 - 22:00	Debriefing of the animation team + Merger / consolidation of the innovation box	Animation team
Thursday 05/09		
09:00 - 11:30	Review of the previous day's visit Sharing inspiring experiences	Animation team Innovative partner producers
11:30 - 12:00	<i>Coffee break</i>	
12:00 - 14:00	<i>Group work</i> Building ideotypes	Animation team
14:00 - 15:00	<i>Lunch break</i>	
15:00 - 18:00	<i>Group work</i> (Continued)	Group rapporteurs
Friday 06/09		
09:00 - 11:30	<i>Plenary session</i> Ideotype feedback and cross-disciplinary discussion	Animation team
11:30 - 12:00	<i>Coffee break</i>	
12:00 - 12:30	Merging ideotypes	
12:30 - 14:00	General debriefing and outlook Workshop evaluation Closing ceremony Press conference	Animation team + Press team
14:00 - 16:00	<i>Prayer break followed by lunch</i>	
16:00	Bus departs from hotel for Fatick	

List of participants

	First and last name	Domain	Function	Structure
1	Alassane Diouf	Producer organization	Referent	Green Niawoul
2	Ngor Sene	Producer organization	Chairman	Dairy cooperative
3	Bassirou Fall	Producer organization	Chairman	Maison des éleveurs (MDE)
4	Marie Diouf	Saliculture company	President	La Reine du Sel Company
5	Louis-Etienne Diouf	Agroecological NGO	Country Manager	AgriSud International
6	Khassim Mbodj	Agroecological NGO	Fatick Coordinator	AgriSud International
7	El Hadj Serigne Touré	Agroecological NGO		Enda Pronat
8	Félicien Gomis	Tourism actor		Tourism
9	Amat Ndong	State services	Chairman	ODCAV (Organisme départemental de coordination des activités de vacances))
10	Ndieneden Diaw	Women's association		Asso femmes Palmarin
11	Omar Ba	Local authorities		Commune of Ndiob
12	Abdou Ndeb Diouf	Local authorities		Municipality of Djilas
13	Maguette Diouf	Local authorities		Municipality of Tataguine
14	Oumy Yandé Sarr	Local authorities		Municipality of Palmarin
15	Simon Bakhoun	Local authorities		Municipality of Fimela
16	Mamadou Dicko Ndiaye	Local authorities		Fatick Departmental Council
17	El Hadj Ndong	Local authorities		Municipality of Fatick
18	Babacar Diop	Drilling management organization		ASUFOR
19	Fatou Binetou Ndour	Environmental association		Ambassadors for the Environment
20	Idrissa Sene	Agroecological NGO		CAREM
21	Fatou Ndong	Processing company	Chairman CDA	Jam Bugum / Agricultural Development Center
22	Aissatou Ndiaye	Processing company	President	Cereal processing unit (UCTL)
23	Bassirou Sarr	State services		Departmental Service for the Promotion of Territorial Development (SDPDT)

24	Captain Sarani Diedhiou	Nature Reserves		Palmarin Community Nature Reserve
25	Gora Ndiaye	Agroecological farm	Director	Kaydara Farm School
26	Idrissa Tinn	Agroecological farm		Kaydara Farm School
27	Cheikh Diouf	Agroecological farm	Chairman	Forestry volunteer / Cooperative
28	Mouhammad Djibril Gaye	Agroecological farm		Kamyac Ecovillage
29	Abibatou Barry	Agroecological farm	Chairman	Kamyac Ecovillage
30	Elisabeth Gueye	Research institution	Project Manager	IPAR / Loul Sessene salinization project
31	Amadou Djiba	Schools (canteen)		ANDPI plant
32	Doudou Thiam	Research institution		Diofior / UCAD
33	Captaine Diallo	Nature Reserve	Curator	Sangomar Marine Protected Area (MPA)
34	Babou Ly	Local authorities	Advisor	Fatick Departmental Council
35	Codou Ndao	Nature Reserves	Agent	Palmarin Community Nature Reserve
36	Modou Gueye Fall	Research institution		ISRA BAME
37	Banna Mbaye	Research institution		ISRA LNRPV
38	Raphael Belmin	Research institution		CIRAD / ISRA BAME
39	Marc Piraux	Research institution		CIRAD / ISRA BAME
40	Oumar Lo	Research institution		ISRA BAME
41	Cherif Mané	Research institution		ISRA BAME
42	Mame Birame Sene	DyTAEL (Technical Committee)		CT DyTAEL of Fatick
43	Coumba Ndoffène Ndour	DyTAEL (Technical Committee)		CT DyTAEL of Fatick
44	Abdou Senghor	DyTAEL (Technical Committee)		CT DyTAEL of Fatick
45	Ibrahima Diouf	DyTAEL (Technical Committee)		CT DyTAEL of Fatick
46	Arame Diouf	DyTAEL (Technical Committee)		Secretariat
47	Ibrahima Diallo	Research institution		ISRA BAME
48	Geneviève Dione	Research institution		ISRA BAME
49	Abdou Ka	Research institution		UASZ
50	Ndeye Bity Kebe	Research institution		ISRA CNRF
51	Dioumacor Fall	Research institution		ISRA CNRF

Innovation box

	Tracks	Option 1	Option 2	Option 3	Option 4	Option 5
V1	Organic inputs	Organic matter collection <i>Collection of manure and organic household waste by producers and transport to degraded plots for amendment</i>	Spreading organic matter <i>Producers spread organic matter on degraded plots of land</i>	Raising awareness of organic matter <i>Raising community awareness of the importance of organic fertilizers through agroecological platforms (DYTAEL, FENAB, etc.) and workshops.</i>	Organic matter formation <i>Training in the manufacture and use of organic inputs by technical services through workshops or farmer field schools.</i>	
		Liquid biofertilizers <i>Use of liquid biofertilizers by farmers. Localized or directed application, absorption.</i>	manure <i>Use of green manures by farmers. Burial, ploughing</i>	Compost <i>Compost production, spreading and burial by farmers</i>	Beneficial indigenous micro-organisms (MAB) <i>Production and application of MAB by farmers</i>	
V2	Agriculture-livestock integration	Parking contracts <i>Breeders and farmers revitalize parking contracts</i>	Agriculture-livestock rotation (territory) <i>Breeders and farmers reach a consensus to organize rotations between pastoral and crop-growing areas.</i>	Farmer-breeder relations <i>The community establishes good relations between breeders and farmers through awareness-raising workshops on the importance of livestock-agriculture integration.</i>	Farm-livestock rotation (farm) <i>Growers organize a rotation between cropping areas and parking areas on a farm-wide scale.</i>	
V3	Reasonable use of pesticides	Biopesticides training <i>Partners and technical services train farmers in biopesticide production and use techniques.</i>	Service plants <i>Farmers are introducing species that can fight pests instead of pesticides</i>	Pesticides awareness <i>Technical services and agroecological platforms raise awareness of the dangers of using pesticides on degraded plots of land</i>	Control committees <i>Local authorities, in collaboration with dedicated services (health officers, technical services, judicial officers, etc.), set up committees to monitor the strict application of regulations on pesticide use.</i>	

V4	Erosion control	<p>Cords stone</p> <p><i>Farmers use stone barriers in degraded plots to reduce the speed of runoff.</i></p>	<p>Shrubs catchment areas</p> <p><i>Growers plant shrubs in the watersheds of crop plots to combat wind and water erosion</i></p>	<p>Herbaceous catchment areas</p> <p><i>Growers plant herbaceous species such as vetiver in the watersheds of cultivated plots to combat wind and water erosion.</i></p>	<p>Crop residues</p> <p><i>Farmers conserve crop residues to fertilize fields and combat erosion</i></p>	
V5	Water management water table	<p>Retention basins</p> <p><i>Local authorities, in collaboration with technical and financial partners, are setting up stormwater retention basins for agricultural use.</i></p>	<p>Water platform</p> <p>Stakeholders supervised by local authorities gather around a platform to discuss water governance</p>	<p>Water transfer network</p> <p><i>State and partners build high-quality water transfer networks to fill water-deficient areas</i></p>		
V6	Protection against advancing salt	<p>Anti-salt dykes</p> <p><i>State and partners build anti-salt dykes in salt valleys to limit salt advance</i></p>	<p>Reforestation of salt-affected areas</p> <p><i>Local people and technical services identify local halophyte species and organize reforestation in saline areas</i></p>	<p>Peanut shells and phosphogypsum</p> <p><i>Growers spread peanut shell and phosphogypsum on their plots to limit salinization</i></p>	<p>Manure against salinization</p> <p><i>Farmers spread organic manure on plots to limit salinization</i></p>	
V7	Supervision of salt mining	<p>Storage warehouses</p> <p><i>The State and its partners support salt producers by building storage warehouses to limit stockpiling. in non-salted areas</i></p>	<p>Salt trails</p> <p>State and partners set up trails to transport salt away from production areas</p>	<p>Governance salt mining</p> <p><i>Platforms under the supervision of local authorities implement governance measures for salt operations</i></p>		
V8	Ecological intensification of livestock farming	<p>Parking</p> <p><i>Livestock breeders are made aware of, and supported in, on-farm parking techniques to prevent straying and conflicts.</i></p>	<p>Forage crops</p> <p><i>Technical services raise farmers' awareness of the importance of forage crops to improve animal feed</i></p>	<p>Animal breeds</p> <p><i>Technical services support breeders in artificial insemination and cross-breeding to improve animal production</i></p>		

V9	Ecological intensification of agriculture	Participatory innovation <i>Technical services support growers using participatory approaches.</i>	Support and advice <i>The agroecological transition of farms is supported by NGOs and research institutes (training, awareness-raising).</i>	Agroecological techniques <i>Farmers use a variety of agroecological techniques: crop associations, composting, manure, mulching, zai, organic fertilizers, etc.</i>	Fertilizer plants <i>Use of fertilizer plants by producers (supported by technical services and research institutes) in agricultural areas</i>	bands <i>Combination of cereals and legumes</i>
V10	Reforestation	Shelterbelts <i>Windbreaks set up and maintained in all areas of the communes (fields, green spaces, coastline, villages, houses, places of worship and public spaces) by the communities with the guidance, financial support and monitoring of NGOs and government services.</i>	Continental and marine reforestation <i>Reforestation in inland and marine areas of communes (fields, green spaces, coastline, villages, houses, places of worship and public spaces, etc.) by communities with the guidance, financial support and monitoring of NGOs and state services.</i>	Defensing <i>Defensing reforested areas with the support of water and forestry services</i>	Choice of tree species <i>Reforestation with adapted plants (mangroves, melifera, niawli, eucalyptus, fruit trees)</i>	Reforestation and soil <i>Reforestation taking into account soil types</i>
		Fertilizer trees <i>Leucaena, albizia, lebbeck, faidherbia albida</i>				
V11	Assisted Natural Regeneration (ANR)	Identification of young trees <i>Identification and marking of young shoots by farmers on family farms</i>	Monitoring young trees <i>Maintenance and monitoring of young ANR trees by growers in their agricultural plots, with technical and financial support from NGOs and government departments.</i>	RNA Committee <i>Establishment of an RNA monitoring committee by growers and local authorities, under the direction of water and forestry officials, to maintain and secure young plants through regular monitoring and awareness-raising.</i>	ANR training <i>RNA training for farmers provided by partners and technical services</i>	

V12	Good management forest resources	Drilling advocacy <i>A plea for good management of forest resources</i>	Forest awareness <i>Raising awareness of sound management of forest resources by government departments, POs, NGOs, ASCs, the environmental community and the press.</i>	Safeguarding <i>Forest maintenance and monitoring by communities, NGOs, government services (supervision, financial support and monitoring) in the various communes</i>	Forest resources management <i>Management of forest resources by the population in the various communes using a monitoring plan</i>	Application of the forestry code <i>Forest code enforced through collaboration with the community (local conventions, joint village committees, etc.) and monitoring of sanctions.</i>
V13	Training in timber and non-timber operations	Training in good cutting practices <i>Training in good logging practices provided by forestry authorities, NGOs, local authorities, universities and ISRA. Training courses combine theory and practice, and take place in training centers, universities, town halls, nurseries and community buildings.</i>	Training in good picking practices <i>Training in good harvesting practices provided by water and forestry authorities, NGOs, local authorities, universities and ISRA. Training courses combine theory and practice, and take place in training centers, universities, town halls, nurseries and community buildings.</i>			
V14	Bushfire control	Installation of firewalls <i>Installation of firewalls by forestry authorities and village committees in grazing areas, forest reserves, houses and agricultural plots.</i>	Bushfire awareness <i>Awareness-raising of the population on bushfire prevention by water and forests, NGOs, ASCs, village committees, through conferences, village meetings, etc., in villages, places of worship, etc.</i>	Early fires <i>Controlled early fires carried out by water and forestry services, village committees in areas, forest reserves, agricultural plots, houses, etc.</i>		
V15	Creating green towns and villages	Raising awareness of green cities <i>Awareness-raising of the local population on green housing by communes, NGOs and local elected officials, through conferences, village meetings and ceremonies held in town halls or villages.</i>	A plea for green cities <i>Advocacy for the integration of trees in public spaces by local communities, NGOs, POs, religious guides, environmental commissions and administrative services.</i>	Integrating trees into building permits <i>Local authorities and town planning departments include trees in the building permit, specifying to the owner of each plot that it is imperative to preserve the trees or compensate for any destruction by reforestation.</i>		

V16	Combating soil salinization	<p>Anti-salt dykes</p> <p><i>Installation of anti-salt dykes by the State, NGOs supported by partners and projects on the coastal strip</i></p>	<p>Mangrove reforestation</p> <p><i>Mangrove reforestation by communities, marine protected areas and NGOs in mangrove areas</i></p>	<p>Anti-salt reforestation</p> <p><i>In salt-affected areas, reforestation with salt-adapted species by communities, marine protected areas and NGOs, with the help of research institutes and universities.</i></p>	<p>Use of crop residues</p> <p><i>Use of crop residues (peanut shells, etc.) by producers and NGOs in saline plots.</i></p>	
V17	Compliance with laws and regulations	<p>Ban on marine sand mining</p> <p><i>Ban on marine sand mining by town councils and Marine Protected Areas along the coastline</i></p>	<p>Rigorous application</p> <p><i>Rigorous application of texts by village chiefs, Marine Protected Areas, and town councils in coastal villages</i></p>			
V18	Forage crops	<p>plant identification</p> <p><i>Identification of forage plants (cowpea, panicum, marafalfa) by the local authority in collaboration with the agricultural and livestock services.</i></p>	<p>Forage species</p> <p><i>Production and use of forage species by farmers and breeders</i></p>	<p>Forage improvement techniques</p> <p><i>Producers use silage, straw with urea, and shredder</i></p>	<p>Green jobs</p> <p><i>State and communities create jobs around forage management</i></p>	<p>Promoting forage crops</p> <p><i>Promotion of forage crops by government, NGOs and research institutes</i></p>
		<p>Crop associations and forage</p> <p><i>Farmers grow fodder crops on their farms using intercropping techniques with trees.</i></p>	<p>Forage processing units</p> <p><i>Local authorities, in partnership with the Conseil Départemental and landlords, are setting up fodder processing units.</i></p>			
V19	Promoting renewable energies	<p>Biogas development</p> <p><i>Biogas development on concessions and farms with technical and financial support from NGOs and projects</i></p>	<p>Village wood-energy production</p> <p><i>Production of wood fuel by clearing village groves, by communities, town halls, water and forestry authorities, NGOs</i></p>	<p>Improved fireplaces</p> <p><i>Adoption of improved stoves at concession level by communities and family producer groups (GPF), with the help of NGOs and the State.</i></p>		

V20	Updating forest management plans	<p>Forest code awareness</p> <p>Community awareness-raising on the new forestry code by the State, water and forests via conferences, communal meetings, programs, etc.</p>	<p>Layout plan information</p> <p>Updating the community on the new management plan via forestry and NGOs</p>	<p>Defensing</p> <p>Forestry authorities and communities set aside certain forest areas or sensitive zones. This practice consists of temporarily or permanently prohibiting access to a parcel of forest, to allow the natural regeneration of trees, plants and biodiversity. This prohibition may include activities such as grazing, logging or even human access in certain cases.</p>		
V21	Installation of PAOS	<p>PAOS advocacy</p> <p>Advocacy with local authorities for the creation of PAOS by town councils, NGOs, producers (OP), village committees, etc.</p>	<p>Grazing area</p> <p>Establishment of grazing areas by local authorities</p>	<p>Defensing</p> <p>Inclusion of set-aside areas in the PAOS</p>		
V22	Forest resource management plan	<p>Local agreements forests</p> <p>Implementation of local agreements on forest resources by town councils, water and forestry authorities, NGOs, communities and watchdog committees.</p>	<p>Forest innovation platforms</p> <p>Establishment of communal, inter-communal and departmental innovation platforms by town councils, forestry authorities, NGOs and communities.</p>	<p>Forest management committees</p> <p>Local or regional body responsible for sustainable, participatory forest management. It is made up of a variety of actors: representatives of local communities, landowners, loggers, NGOs, local authorities and other stakeholders. The main objective of this committee is to responsibly manage forest resources while taking into account environmental, economic and social needs.</p>		
V23	Local land use and development agreements	<p>Local agreements</p> <p>The Collectivité Territoriale (CT) is setting up local agreements on salt farming, forestry, livestock breeding and agriculture.</p>	<p>Awareness and meetings</p> <p>Groupements de Promotion Féminine (GPF), Associations Sportives et Culturelles (ASC) and Groupements d'Intérêt Economique (GIE) organize village and neighborhood meetings.</p>	<p>zoning</p> <p>Town halls, communities and technical departments set up zone offices</p>	<p>Definition of convention rules</p> <p>The zoning colonel defines conventional rules and restitution in villages</p>	<p>Adoption of the agreement</p> <p>Adoption of the agreement by the Collectivité Territoriale and the communities</p>

V24	Agroecology training courses	<p>Information and meetings</p> <p><i>Information and awareness-raising meetings on training opportunities are organized by vocational training schools in partnership with town councils and technical departments.</i></p>	<p>offers</p> <p><i>Training courses are developed and delivered by town councils and technical departments in collaboration with research institutions and NGOs.</i></p>	<p>partnership agreements</p> <p><i>Training partnership agreements are drawn up by authorities, TCs, POs and partners.</i></p>	<p>Agroecology training guidelines</p> <p><i>Development and validation of an agroecology training framework by the State (if no such framework exists)</i></p>	<p>training</p> <p><i>Vocational training centers (CFPs) train learners. These training courses will lead to certification</i></p>
V25	Access to land	<p>Awareness on access to</p> <p><i>Town halls, the community, partners or civil society organize awareness-raising activities on access to land for producers.</i></p>	<p>Deliberate granting of leases and land titles</p> <p><i>In collaboration with the CT, the tax and estates department grants leases and land titles to producers by deliberation.</i></p>	<p>Land development</p>		
V26	Diversification of agricultural and income-generating activities	<p>Arboriculture</p>	<p>Vegetable growing</p>	<p>Breeding</p> <p><i>Poultry, fattening, dairy</i></p>	<p>Arable crops</p> <p><i>Peanut, cowpea, bissap</i></p>	
V27	Efficient water management system	<p>Inclusive water management</p> <p><i>Associations d'usagers de forage ruraux (ASUFOR) set up an inclusive water management system</i></p>	<p>Water management training</p> <p><i>Technical services train managers in organizational dynamics around water management</i></p>	<p>Administration training</p> <p><i>Technical services and partners train management committees (CVD) in administrative and financial management for productive water.</i></p>	<p>Seat installation</p> <p><i>Zoning colonel sets up headquarters with water management facilities</i></p>	
V28	Reactivation of ancient agroforestry practices	<p>Grove restoration</p> <p><i>Village development committees (CVDs) keep an eye on the groves</i></p>	<p>Restoring communal and village woods</p> <p><i>CVD reforests and protects communal woods</i></p>			

V29	Raising awareness of cultural identity among younger generations	Directory of ancestral practices <i>The CVDs and CDQs (Comité de développement de quartier) identify ancestral agricultural practices through a diagnostic study.</i>	Selection of ancestral practices <i>CVDs and CDQs organize workshops to select good ancestral agroecological practices</i>	Targeting beneficiaries <i>The commune, with its CVDs and CDQs, targets young people with potential for success</i>	Skills transfer <i>The commune and its partners transfer ancestral agroecological best practices to farmers</i>	
V30	Rehabilitation and reinforcement of hydraulic infrastructures	Identification of structures <i>The local authority, in collaboration with the deconcentrated technical services, identifies functional hydraulic structures.</i>	Strengthening management capabilities <i>The local authority, in collaboration with the CTD, strengthens the local authority's capacity to manage hydraulic structures.</i>	Rehabilitation of structures <i>The local authority, in collaboration with the CTDs, rehabilitates hydraulic structures</i>	Water reclamation <i>The local authority installs rainwater collection and distribution systems (retention basins, gutters).</i>	
V31	Extension and modernization of hydraulic networks	Routing drinking water <i>The local authority identifies the areas where the water is potable and then transfers this potable water to the affected areas.</i>	Extension water networks <i>The local authority extends existing networks through agreements and contracts</i>	Desalination plants <i>The local authority initiates marine water desalination projects to produce fresh water and recover sea salt</i>		
V32	Salt recovery	Salt farming training <i>ONFP offers training in salt production for salt producers</i>				
V33	Adoption of water-saving practices	Economical farming practices <i>Farmers adopt water-saving systems (mulching, zai, drip irrigation, trough cultivation, boccachi) adapted to the type of crops grown</i>	Agroecological surveys <i>The local authority surveys producers on their level of agroecologization</i>	Capitalization <i>The local authority capitalizes on water-saving agroecological practices in a document</i>	Pooling <i>The local authority organizes exchange visits between farmers to share water-saving agroecological practices.</i>	

V34	Productive water price reduction policy	Water pricing consultation framework <i>The local authority sets up a framework for consultation on water pricing (consumers, operators, town council).</i>	Consensus on water prices <i>Tripartite committee (local authority, ASIFOR, administrative authorities) reaches consensus on reducing the price per cubic metre of water.</i>			
V35	Promoting family farming	Training heads <i>by DYTAEL</i>	Technical and support <i>by DYTAEL</i>	Slogan Adoption of the slogan: one family, one agroecological farm		
V36	Promoting farmers' seeds	Training in seed bank construction <i>Technical services and partners, in collaboration with the TC, train producers to set up seed banks</i>	Farmers' seed banks <i>Growers set up seed banks</i>	Seed partnerships <i>Growers set up partnerships with research institutions such as ISRA</i>	Farmers' seed production <i>An agricultural cooperative mobilizes a field to produce certified, state-supervised peasant seeds</i>	
V37	Securing lean periods	Welding storage <i>Producers store surplus production in warehouses, grain banks and granaries.</i>	Deposit and pre-financing <i>Producers or umbrella organizations have access to bank deposit and pre-financing systems to avoid scrapping their production (ORSRE, Ministry of Trade).</i>	Diversification <i>Growers diversify their crops in order to secure</i>		

V38	Training and follow-up	<p>Transformation training</p> <p><i>The interprofession, in collaboration with the Institut de Technologie Agro-alimentaire (ITA), organizes training sessions on processing techniques for women processors, in the form of workshops and seminars.</i></p>	<p>Administrative and financial management training</p> <p><i>The interprofession, in collaboration with NGOs such as ENABEL, World Vision and Wetlands International, organizes training sessions in administrative and financial management for managers of agri-food processing units, in the form of workshops and seminars.</i></p>	<p>Training in storage and preservation techniques</p> <p><i>The interprofession, in collaboration with local authorities, hygiene services and the Institut de Technologie Agro-alimentaire (ITA), is organizing training sessions on storage and preservation techniques for women processors, in the form of workshops and seminars.</i></p>	<p>Hygiene and quality training</p> <p><i>The interprofession, in collaboration with the Institut de Technologie Agro-alimentaire (ITA) and the hygiene services, is organizing training sessions on hygiene and quality in agri-food processing, aimed at women processors, in the form of workshops and seminars.</i></p>	
V39	Setting up an interprofession	<p>Inter-profession prospecting</p> <p><i>Unions by sector, in collaboration with municipalities and NGOs (Enda pronat, Wetlands International and Enabel) identify the actors involved in the marketing of local products with a view to building an interprofessional network.</i></p>	<p>Setting up an interprofession</p> <p><i>Establishment of an interprofessional grouping of producers, processors and buyers, municipalities</i></p>			
V40	Technical and financial partnerships	<p>Mutual partnerships</p> <p><i>Processors build partnerships with credit and savings mutuals</i></p>	<p>Banking partnerships</p> <p><i>Processors build partnerships with banks</i></p>	<p>Project partnerships</p> <p><i>Processors collaborate with projects and programs</i></p>	<p>Chamber partnerships</p> <p><i>Processors build partnerships with consular chambers</i></p>	<p>NGO partnerships</p> <p><i>Processors build partnerships with NGOs and TFPs</i></p>
V41	Development of a social economy	<p>Reinforcement self-managed caisses</p> <p><i>The interprofessional organization identifies and supports self-managed funds by building the capacity of groups to structure and operate each type of fund.</i></p>	<p>Voluntary contribution in kind and/or in cash</p> <p><i>Members of groups and production units support the revival of activities of units in difficulty by making contributions in kind (millet, peanuts, maize, etc.) or in cash.</i></p>	<p>Joint and several surety</p> <p><i>The interprofession organizes training sessions, information workshops and awareness campaigns on the responsibilities of joint surety, access to credit and guarantees, and support in the event of disputes or payment defaults, for the benefit of member unions and production units.</i></p>	<p>Flow partnerships</p> <p><i>Partnership between processors and local retailers to market local products</i></p>	

V42	Diversification of financing mechanisms	<p>Partnerships for financing</p> <p><i>Establishment of a partnership between inter-professional organizations and CBOs of producers and processors, NGOs (GIZ, Wetlands International) and banks</i></p>	<p>Self-financing mechanisms</p> <p><i>Niéty tiabi, tontines, credit and savings mutuals</i></p>	<p>Loans</p> <p><i>Loans in kind to producers (millet, peanuts) and cash repayment</i></p>	<p>Pre-financing</p> <p><i>Pre-financing of processing and production by customers, advance on production</i></p>	
V43	Creation/strengthening of processor cooperatives	<p>Awareness and leadership</p> <p><i>The interprofession organizes awareness-raising and training workshops on the benefits of cooperatives, as well as on management and leadership.</i></p>	<p>Grouping/Union of transformation actors</p> <p><i>Agri-food processing units set up a democratic governance structure that brings together various local processors</i></p>	<p>Formalizing the union</p> <p><i>The members of the Union's executive committee take all the necessary steps to obtain legal recognition for the structure.</i></p>	<p>Capacity building for union members</p> <p><i>The union organizes targeted training on management, marketing and processing techniques, while offering practical guidance and technical support to improve members' skills and efficiency.</i></p>	
V44	Agreement with producers	<p>Search for reliable partners</p> <p><i>The Union des producteurs conducts an in-depth analysis of producers' needs and capabilities, and identifies potential partners.</i></p>	<p>Sample presentation and analysis</p> <p><i>The Producers' Union prepares detailed demonstrations of product characteristics, such as quality, compliance with standards, and added value.</i></p>	<p>Exchange on agreement terms</p> <p><i>The Producers' Union organizes meetings with all stakeholders to discuss the proposed terms, clarify mutual expectations, and negotiate the terms of agreement.</i></p>	<p>Formalizing and signing the agreement</p> <p><i>The Producers' Union formalizes agreements through clear conventions and mutual commitments with partners to ensure fruitful collaboration.</i></p>	<p>Convention monitoring and evaluation</p> <p><i>The Producers' Union sets clear performance indicators, carries out regular checks to verify compliance with commitments, and organizes regular meetings with stakeholders.</i></p>
V45	Innovative marketing and distribution strategy	<p>Market research</p> <p><i>The interprofession identifies the outlets for its products: marketing, self-consumption, intra-consumption, etc.</i></p>	<p>Sales areas</p> <p><i>The interprofession is approaching municipalities to obtain space dedicated to the marketing of local produce and agroecological products at local markets.</i></p>	<p>E-commerce</p> <p><i>The interprofession dematerializes its sales channels through online sales and e-commerce</i></p>	<p>Exchange visits</p> <p><i>Interprofession organizes national and sub-regional trade visits to promote local products</i></p>	

V46	Creation of market niches	<p>Niche market partnership agreements</p> <p><i>The interprofession established partnership agreements with NGOs (GIZ, ENABEL, ENDA) on marketing techniques; (ii) banks (BOA, CMS, PAMECAS, Baobab) on financing; (iii) the State for mediation between manufacturers and producers.</i></p>	<p>Market segmentation</p> <p><i>The interprofession develops segmentation strategies based on market surveys and studies</i></p>	<p>Building the offer</p> <p><i>The interprofession formulates tailored offers in terms of competitive prices, top-quality products and strategic locations.</i></p>	<p>Formalization and authorizations</p> <p><i>The interprofession obtains local approvals, export approvals, quality certificates, certificates of origin and customs declarations.</i></p>	
V47	Opening up	<p>Open-up partnership agreement</p> <p><i>The interprofession has established partnership agreements with NGOs (GIZ, ENABEL) and municipalities.</i></p>	<p>Track construction</p> <p><i>The interprofession, with the support of municipalities and NGOs (Enabel, Wetlands, Enda Pronat), is setting up production tracks in laterite (in salt zones) or in shells (adapted to tricycles in the islands).</i></p>	<p>Means of transport</p> <p><i>Municipalities, with the support of their technical and financial partners, provide interprofessions with adapted means of transport: boats (for the island part), tricycles, trucks.</i></p>	<p>Storage</p> <p><i>Municipalities, with the support of their technical and financial partners, provide the interprofessions with storage facilities: storage areas, warehouses, cold stores, cold rooms, etc.</i></p>	
V48	Attractiveness in the agricultural sector	<p>Attractiveness partnership agreements</p> <p><i>The interprofession has established partnership agreements with banks (Islamic banks, Locafrique), NGOs and government departments (labor inspectorates, IPRESS, CSS).</i></p>	<p>remuneration</p> <p><i>Decent wages and social protection for workers</i></p>	<p>Mechanization and reduced drudgery</p> <p><i>Thanks to the support of NGOs (Enabel, Enda Pronat and Wetlands International), technical and financial partners and decentralized government departments, the interprofession grants machinery (tractors, power tillers, harvesters, mills, pelletizers, bagging machines) to farmers and processors to ease the arduous workload.</i></p>	<p>Monitoring and evaluation of workforce</p> <p><i>The interprofession monitors and evaluates partnership agreements with banks, NGOs and government services to maintain the workforce.</i></p>	

V49	Labelling of processed products	<p>Union by</p> <ul style="list-style-type: none"> - Local cereals - Salt - Fishery products - Market garden products - Milk and poultry - Forest products 	<p>Labellisation partnership agreement</p> <ul style="list-style-type: none"> - Consular chambers (chambers of trade, chambers of commerce) - Breeders' homes - Computer graphics designer - Economic control - Hygiene services - ITA 	<p>Territorial marketing</p> <p>The union of processors harmonizes their manufacturing and preservation techniques, logo, color, brand, and name.</p>	<p>FRA</p> <p>Identification of the manufacturer of each product: FRA number</p>	<p>Legal recognition</p> <p>The union of processors obtains legal recognition of the label from the BSDA and all competent authorities (APIX).</p>
V50	Promoting local consumption	<p>Interprofessional Union</p> <ul style="list-style-type: none"> - Processors - Producers - State structures - Mass catering chains 	<p>Interprofessional union that signs agreements</p> <p>The interprofessional union signs agreements with school canteens, hotels, restaurants, prisons and hospitals to promote the consumption of local produce.</p>	<p>Eat local promotion</p> <p>The interprofessional union raises community awareness through broadcasts and tea-debates on the importance of consuming locally.</p>	<p>Culinary art promotion</p> <p>The interprofessional union promotes the culinary art of local products (millet, peanuts, corn).</p>	<p>Tastings</p> <p>The interprofessional union organizes culinary tasting sessions, broadcasts, tea-debates and awareness-raising campaigns on the benefits of consuming locally.</p>
V51	A plea to increase subsidies for organic materials	<p>Institutional support by DyTAEL</p> <p>Dytael lobbies political decision-makers to increase subsidies for organic materials</p>	<p>Identification of production actors</p> <p>Dytael identifies agricultural production actors involved in agroecology in the Fatick department</p>	<p>Identifying producers' needs</p> <p>Dytael identifies the organic matter needs of the production actors identified.</p>	<p>Meeting with decision-makers</p> <p>Presentation of scientific evidence on the benefits of using organic matter</p>	<p>Monitoring and evaluating decisions</p> <p>Dytael regularly collects data on the extent to which decisions have been implemented, and measures their effectiveness and compliance with objectives.</p>
V52	Agroecology in Community Development Plans (CDPs)	<p>PDC awareness</p> <p>PREDA and DyTAEL raise political awareness of the importance of the CDP by organizing consultation meetings at local authority level.</p>	<p>Financial mobilization capabilities</p> <p>Local authorities become more efficient in mobilizing financial resources</p>	<p>PDC design</p> <p>Resource persons are involved in the design of the PDC</p>	<p>Agroecology in PDC</p> <p>Agroecological actions are integrated into the DCP</p>	<p>PDC monitoring and evaluation</p> <p>Regional Development Agencies (RDAs) and local elected representatives compare what has been planned with what has been achieved in each commune.</p>

V53	Transfer of agricultural powers to local authorities	Legal advocacy <i>Civil society, producer organizations and local authorities are lobbying for a legal framework that integrates the agroecological dimension.</i>	A plea for the transfer of resources <i>Transfer of powers to local authorities with appropriate resources</i>	Budget line <i>Define a budget line for agroecology in local authority budgets</i>	Work plan <i>Dytael defines annual agroecology work plan</i>	PTA monitoring and evaluation <i>The communes define Annual Work Plans (AWPs) and regularly monitor the activities carried out.</i>
V54	Raising awareness of agroecology	Fora and school fields <i>Dytael and local authorities organize forums and field schools in communes</i>	Raising awareness of agroecology through community media	Exchange visits and agroecology caravans	Communication materials in local languages	Information meetings <i>The consultation framework organizes meetings and information sessions with decision-makers in each arrondissement.</i>
V55	Co-designing agroecological projects with local authorities	Harmonizing actions <i>Harmonization of all agroecology-related activities</i>	Mapping the actors <i>Local authorities map the initiatives of their stakeholders and their agroecological potential.</i>	Consultation framework <i>Establishment of a framework for consultation and coordination between stakeholders (Dytael, local authorities, technical services, projects and programs) by decree.</i>	Institutionalization of the consultation framework	Member capacity building <i>DyTAEL and local authorities strengthen the capacities of their members through workshops and harmonization meetings at district level.</i>
V56	Agroecology in public sector policies	Strengthening advocacy <i>DYTAES and DyTAEL step up advocacy of agroecology with state and local authorities</i>	Creation of communal entities <i>DYTAEL is being deployed in all zones, creating communal entities and not just communal referents.</i>	Capacity building <i>The State, through its projects and programs, and DYTAES strengthen the capacities of DyTAELs and Communes.</i>	Planning tools for agroecology <i>Agence Régionale de Développement designs planning tools focused on agroecology</i>	Sectoral policy monitoring system <i>The Regional Development Agency and consultation frameworks identify the level of implementation of sectoral policies in all communes.</i>

V57	Training actors in agroecological practices	<p>Agroecology training</p> <p><i>CFP, USSEIM and ISRA organize training workshops and seminars in partnership with local authorities</i></p>	<p>Training courses in partnership with USSEIN</p>	<p>Specialty certificates in agroecology at CFPs</p> <p>Training organizations and universities are setting up training standards in the Vocational Training Centers (Centres de Formation Professionnels - CFP).</p>	<p>Financing training and integration</p> <p><i>Financing structures involved in training and integration (3FPT, ONFP, PF2E)</i></p>	<p>Monitoring and evaluation of information systems</p> <p><i>Research institutes, technical departments, DyTAEL, consultation frameworks and training organizations assess the level of training carried out at training centers.</i></p>
V58	Building a farmers' seed industry	<p>Community granaries in the communes</p> <p><i>Local authorities build and refurbish stores in communes</i></p>	<p>Collaboration with agricultural research institutions</p> <p><i>Municipalities sign agreements with research institutions</i></p>	<p>Plots dedicated to farmers' seed production</p>	<p>Training in local seed production</p> <p><i>Research and extension institutions build producers' capacity to produce local seeds</i></p>	<p>Agreements with technical services</p> <p><i>DyTAEL signs agreement with technical services to monitor farmer seed activities</i></p>
V59	Promotion and enhancement of agroecological products	<p>Markets for agroecological products</p> <p><i>Local authorities set up and develop marketing outlets for agroecological products</i></p>	<p>Tax exemption for agroecological products</p> <p><i>Communes adopt tax exemption for agroecological products at markets</i></p>	<p>Value chains for agroecological products</p> <p><i>Processors, producers and consumers harmonize their activities at national level to build value chains for agroecological products</i></p>	<p>Marketing plan for agroecological products</p> <p><i>Development of a marketing plan for agroecological products by mobilizing a consultancy firm to draw up a set of specifications.</i></p>	<p>Certification of agroecological products</p> <p><i>Certification of agroecological products (SPG and certification bodies) adopted and recognized by producers, consumers, processors, NGOs... Inspection visits are carried out at farm and store level.</i></p>

V60	Sustainable Land Management (SLM) programs	<p>Training in TDM techniques</p> <p><i>Local authorities, in partnership with DyTAEL and ISRA, train farmers in reforestation, embocagement and RNA techniques.</i></p>	<p>Provision of work equipment for producers</p> <p><i>The State, NGOs and projects subsidize agricultural equipment.</i></p>	<p>TDM implementation support</p> <p><i>Technical departments consolidate and expand TDM initiatives</i></p>	<p>Sharing results and experiences</p> <p><i>DyTAEL encourages the sharing of experience on TDM initiatives via exchange meetings at commune level.</i></p>	<p>Monitoring and evaluation of TDM actions</p> <p><i>In all communes, water and forestry authorities create a consultation framework that identifies the level of SLM implementation.</i></p>
V61	Territorial marketing strategy	<p>National and international trade fairs</p> <p><i>DyTAEL and its partners organize exhibitions, symposia, fairs, etc. in local communities.</i></p>	<p>Digital platforms dedicated to agroecological products</p> <p><i>The Cadre de concertation and DyTAEL, supported by a communications consultancy, are creating digital media (website, social networks, etc.) focusing on the region's assets.</i></p>	<p>Partnerships with hotels and restaurants</p> <p><i>DyTAEL signs department-wide agreements to market local produce in hotels</i></p>	<p>Ecotourism</p> <p><i>DyTAEL, the regional tourism department and tourist offices identify and promote existing ecotourism sites with agroecological features (information desk, trails, ecological paths).</i></p>	<p>Communication for territorial marketing</p> <p><i>DyTAEL and its partners are working together to develop a communications strategy for the territorial marketing of the department's products.</i></p>
V62	Promotion of Products of Territorial Interest (PIT)	<p>Capacity building for processors</p> <p><i>ITA and 3FPT provide training through workshops and seminars for local authorities.</i></p>	<p>Reinforced storage and preservation facilities</p> <p><i>Partners, PTFs, CTs and the State build and rehabilitate storage warehouses in production areas</i></p>	<p>Support for standardized processing equipment</p> <p><i>Government, NGOs and projects subsidize processing equipment in production areas</i></p>	<p>Formalizing and obtaining FRA authorization</p> <p><i>To help processors formalize their operations and obtain FRA authorization, DyTAEL and its partners submit applications with samples to the state level</i></p>	<p>Promoting local products</p> <p><i>DyTAEL and its partners organize culinary fairs (stands), tea debates, radio broadcasts and advertising on social networks to promote traditional dishes and the consumption of PIT in school canteens and elsewhere.</i></p>

V63	Education in eco-responsible behavior	<p>A plea for agroecology in school curricula</p> <p><i>DyTAES, IA, IEF meet academic authorities through awareness-raising sessions in schools</i></p>	<p>Revitalizing environmental clubs</p> <p><i>Pedagogical units, partners and colleagues revitalize environmental clubs through concrete actions at school level. E.g.: Environment Day</i></p>	<p>Supporting citizens' initiatives</p> <p><i>Support citizens' initiatives to promote agroecology. Involvement of CSAs, GPFs, civil society, agriculture and environment committees, etc.</i></p>	<p>Agroecology Day</p> <p><i>DyTAEL, the Ministry of Agriculture and local authorities set up and financially support an annual Agroecology Day. The day is celebrated in schools and daraas.</i></p>	<p>Supporting behavior change</p> <p><i>DyTAEL, partners, a consultation framework and a communications agency organizing department-wide communications initiatives (forum theaters, raising awareness among opinion leaders, educational materials) to encourage eco-responsible behavior.</i></p>
		<p>Agroecology Awards</p> <p><i>Local authorities organize an agroecology award</i></p>				

