



Atelier de Consultation nationale sur l'Agenda Scientifique pour l'Agriculture en Afrique (S3A)

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Report on Workshop



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List of Acronyms and Abbreviations

ASPRODEB	Senegalese Association to promote Grassroots-Based Development
CGIAR	Consultative Group on International Agricultural Research
CLM	Unit for Combating Malnutrition
CLPA	Local Councils for Artisanal Fishing
CNASS	Senegal National Agricultural Insurance
CORAF/WECARD	West and Central African Council for Agricultural Research and Development
DAPSA	Department Of Agricultural Analysis, Forecast And Statistics
DGR	Research Directorate
FARA	African Forum for Agricultural Research
IFAD	International Fund for Agricultural Development
FNRAFP	National fund for agro-forestry-pastoral research
ISEP	Higher Institute of Vocational Studies
ISRA	Senegal Institute for Agricultural Research
ITA	Institute of Food Technology
LOASP	Agro-Forestry-Pastoral Framework Law
MAER	Ministry for Agriculture and Rural Equipment
MESR	Ministry for Higher Education and Research
OHADA	Organisation for the Harmonisation of Business Law in Africa
OPA	Organisation of Agricultural Producers
PAPA	Project for supporting Agricultural Policies
CAADP	Comprehensive Africa Agricultural Development Program
PI	Innovation Platform
SME-SMI	Small & Medium Enterprise-Small & Medium Industry
PNDE	National Farming Development Programme
PNIA	National Agricultural Investment Programme
UNDP	United Nations Development Programme
WAAPP	West Africa Agricultural Productivity Programme
PRACAS	Senegal Programme for Agriculture Recovery and Acceleration

PSE	Senegal Emerging Plan
AWPB	Annual Work Plan and Budget
R&D	Research and Development
S3A	Scientific Agenda for Agriculture in Africa
SNRASP	National Systems for Agro-forestry-pastoral Research
SOCAS	Senegal Canned Food Companies
STI	Science Technology and Innovations

Introduction

The national consultative workshop on the Scientific Agenda for Agriculture in Africa (S3A) was held at the Research Centre of the Senegal Institute for Agricultural Research (ISRA) in Dakar from 17th to 19th July 2017. The S3A emanates from the Dublin process (June, 2017) as a framework for strengthening the investment focus of the Consultative Group on International Agricultural Research (CGIAR) of the CAADP, which then evolved into a global framework for growth in the application of Science, Technology and Innovations (STI) with the aim of achieving its objectives, which particularly focus on productivity. Regional workshops were thus organized to launch the S3A and in order to deepen the gains made at the regional level, a first list of **five** countries were chosen for further national consultation with a view to developing an S3A project implementation document to be submitted to IFAD. **These four countries are:** Malawi in South Africa; Rwanda in East Africa; Ghana and Senegal in West Africa; Egypt in North Africa.

Organized by the Senegal Institute for Agricultural Research (ISRA) under the auspices of the Ministry for Agriculture and Rural Equipment (MAER) in collaboration with the West and Central African Council for Agricultural Research and Development (CORAF/WE CARD) and the Forum for Agricultural Research in Africa (FARA), the national consultation in Senegal had the following objectives: (i) sensitize participants on the progress made on the S3A strategy; (ii) outline a change theory and a results framework which highlights scientific priorities, needs and reference data and (iii) launch a controlled process aimed at strengthening Senegal's participation in the implementation of S3A.

About fifty people participated in this meeting, representing at least thirty (30) institutions (national, sub regional and regional) working in the field of agriculture, livestock farming, fishing, agricultural advisory sector, research, private sector and civil society as well as resource persons (see list of participants attached)

This three day workshop was marked by plenary sessions and group consultations. The sessions were preceded by an opening ceremony, presided over by the Director of the Ministry for Agriculture and Rural Equipment in Senegal.

1 Opening Ceremony

As part of the opening ceremony, there were speeches by the Director General of ISRA, the Executive Director of (CORAF/WE CARD), the Representative of the Executive Director of FARA and the Representative of the Minister for Agriculture and Rural Equipment (MAER) respectively.

The Director General of ISRA (Dr. Alioune FALL) welcomed participants by recollecting the context within which the workshop was organized. He also touched on the PRACAS of the MAER and its linkage with the vision of Senegal's Head of State outlined in the PSE (Senegal emerging plan). He also thanked all participants particularly the S3A Organising Committee. In conclusion, he expressed his wishes for the success of the workshop.

The Executive Director of (CORAF/WE CARD) (Dr. Abdou TENKOUANO) thanked the Government and People of Senegal for accepting to host their head office. He then reiterated the mission of (CORAF/WE CARD) before touching on their strategic and operational plans which were being revised. He commented on the link between agricultural policies in Africa and S3A. In addition, he highlighted Africa's agricultural potential (30% of arable land etc.) and the role of STI in agricultural transformation.

The Representative of the Executive Director of FARA (Dr. Jonas MUGABE) welcomed participants. He briefly reminisced on events and on the development process of S3A. He indicated that there is now

empirical proof to show that agricultural transformation depends on STI. He expressed his gratitude to FIDA for financing these consultations; and then launched an appeal for other funding partners to support the African continent. In addition, he indicated that the S3A is not a project, rather a concept for the transformation of Africa and a far reaching programme whose objectives are well aligned with Sustainable Development Objectives (ODD). He noted that a step by step approach is used in the implementation of S3A, with four (04) countries on a pilot basis, to ensure continuous learning.

The Representative of MAER (Mr Modou MBOUP) expressed the apologies of the Minister for Agriculture for his inability to preside over the workshop due to a busy schedule. He then thanked FARA for standing by his choice of Senegal for the pilot phase. He stressed on the need to make science for development sustainable, having the potential to improve the living conditions of populations; which, in his opinion, is implicit in the S3A programme. Mr MBOUP emphasized the importance of cooperation and creation of synergy while avoiding duplications. He stated that he was happy that Africa had understood the importance of pooling resources in order to achieve expected results. He ended his speech by declaring the workshop opened and expressed the hope that the workshop will be a success.

2 Proceedings

2.1 Overview of S3A : Strategy and Implementation Status

During this plenary session, five presentations were made by the FARA team, enabling national actors to have an overview of the S3A, its formulation process, plans for implementation in selected countries as well as strategies for attainment. At the end of these presentations, there were discussions on the issues addressed during this part of the workshop.

2.1.1 Presentations

The first presentation (**by Enock WARINDA**) was an **analysis of the Scientific Agenda for Agriculture in Africa (S3A)** in its entirety by highlighting its vision, its origins, its formulation, its ownership and its current implementation status. The vision of S3A is that «by early 2030, Africa will achieve food security, become a global scientific actor and a global breadbasket». This vision is derived from a comparative analysis of the growth of agricultural productivity in Africa as against the global context (1.9 for Africa and 6.6 for developed countries). The identified gap is worsened by the fact that the agricultural sector is not taken into consideration in public expenditure. To address this situation, the S3A intends to achieve the following in the short term: increase public expenditure on Agriculture; strengthen the capacity of stakeholders, particularly women and the youth; and finally double the level of agricultural productivity in the long term. The choice of Senegal in this pilot phase is justified, according to FARA, by its commitment and level of preparedness to implement the S3A.

The second presentation (**by Jowa Tafadzwa**) on the **creation of an enabling policy environment for science** outlined the process of policy self-evaluation using the PPI tool, to achieve the Malabo objectives. The analysis was on the policy instruments, policy documents, laws and regulations etc. The guiding principles for the use of this tool are based on: an increase in local expertise with respect to policy evaluation; ownership, constructive and non-evaluative dimension of the tool; the use of a participatory and replicable process; orientation towards action and evidence-based interventions. The methodology for the implementation of this tool comprises evaluation by local experts, validation by stakeholders and re-evaluation by other experts.

The third presentation (**by Amos GYAU**) focused on **strengthening human and institutional capacities in the use of science for agriculture**. The presentation noted that training constitutes a component,

among others, for strengthening capacity. According to the UNDP, the latter is an inclusive and sustainable participatory process aimed at making individuals and societies autonomous. However, it is important to note, together with the World Bank, that there has been a failure to achieve the MDGs with respect to this thematic. The capacity strengthening process must start with the involvement and commitment of partners, identification of needs, the definition of strategies to bridge the gap and the efficiency of the monitoring and evaluation system. FARA and its members such as (CORAF/WE CARD) can provide technical assistance in the process. There are various capacity strengthening models, according to FARA, among which that of UniBRAIN is a successful incubation model for youth in agriculture, together with public and private actors. To summarize, capacity strengthening as part of an integrated and gender sensitive approach remains an important lever of S3A.

The fourth presentation (by **Jonas MUGABE**) was on facilitating the **creation of S3A implementation platforms at the continental level**. It focused on the Agricultural Innovation System (SIA) which is an effective framework, enabling the S3A to impact the socio-economic life of final users of Research results. He also shared with participants, the definition of an innovation platform, its classification according to the operational level and results obtained from the practical implementation of this tool. Nevertheless, according to the presenter, there is the need to institutionalize the SIA and put in place a strategic Innovation Platform (PI) for the S3A.

In the fifth presentation (by **Benjamin ABUGRI**) on **knowledge management**, it emerged that the latter should not only involve the collection of knowledge but beyond that, it should ensure the connection between all stakeholders to facilitate identification and access to information relevant to S3A. This work will be based, according to FARA, on the national PIs which will be the entry point for the collection of data. Also presented were the structure and four (04) components of the knowledge management system as well as some existing information platforms.

2.1.2 Discussions

At the end of this series of presentations, there were discussions on the following salient points:

- The need to evaluate the various existing innovation platforms in order to draw lessons from their implementation and adaptation to the Senegalese context. It will also be interesting to learn from the experience of consultative frameworks and inter-professional committees such as the one on the Tomato sector with SOCAS which is considered as a successful model. FARA does not propose a model and from experience, there is the understanding that national stakeholders must be given the freedom to define and adapt their own S3A implementation model. The WAAPP innovation platforms can provide lessons.
- The issue of funding mechanism and collaboration strategy, various stakeholders will be mapped and their contributions evaluated. It must be noted that contributions could be in kind for some stakeholders.
- The risks of failure of such a programme will be outlined in collaboration with all stakeholders and will constitute a key element of the logical and theoretical framework for change of the S3A in Senegal and will certainly be the focus of monitoring and evaluation.
- The question of taking into account the private sector, agricultural advisory, livestock farming and health safety sectors was raised since they are, according to FARA, stakeholders in the project conception process.

2.2 Profile of Senegal and national success factors

In this session, six presentations were made by DAPSA/MAER, FNRASP, AfricaRice, ASPRODEB, INTERFACE and the Head of Research of the Ministry for Higher Education and Research (MESR).

2.2.1 Presentations

The first presentation by the representative of the Director of DAPSA, on the **role of the Ministry for Agriculture and Rural Equipment** in the promotion of the national agricultural sector and achievement of the PDDAA objectives focused on some elements in the agricultural policy landscape. He recalled the Senegal Programme for Agriculture Recovery and Acceleration (PRACAS) which constitutes the agricultural component of the Senegal Emerging Plan. In this presentation, it emerged that Senegal has averaged more than the 10% stipulated by the PDDAA in terms of allocation of resources from the national budget to the agricultural sector. The other elements focused on the livestock farming sector, fishing, environment and on challenges such as reduction in post harvest losses, strengthening of governance and availability of certified rice seeds.

The second presentation by Mr. Moussa Fall, Permanent Secretary of the **National Systems for Agro-Forestry-Pastoral Research (SNRASP)**, outlined the role of his institution which aims to establish inter-institutional cooperation for research and development of agriculture, forestry and livestock in Senegal. According to Mr FALL, various activities have been undertaken to date with respect to, among others, the development of a competence dossier and of scientific and technical potential, the organisation of exchange programmes and meetings, the creation of a network of journalists to relay results of research and agricultural developments, strengthening of the capacity of researchers and the organization of a conference presided by the authorities (Ministries of Higher Education and Agriculture). The SNRASP still face challenges regarding financial commitment of institutions, de-compartmentalization of researchers and the ongoing legal institutionalization of consultative frameworks.

The third intervention focused on the **role of CGIAR in Senegal's agricultural sector** based on the example of the African Centre for Rice, AfricaRice created by 11 countries in 1971 before it grew to 26 member countries. The presenter indicated that the mission of AfricaRice aligns perfectly with that of S3A, with the aim to contribute to poverty reduction and to guarantee food security. AfricaRice depends on the mechanisms of CGIAR, action groups and the Hub to work with all stakeholders in the rice value chain. It is in the process of implementing four programmes on: genetic diversity and improvement in varieties (200 improved varieties distributed and 8 million people in 16 countries are considered to be out of the poverty bracket); sustainable improvement in the productivity and management of natural resources; learning system and the rice development sector.

The **role of producer organisations in Senegal's agricultural sector** was discussed as part of the fourth presentation by Mr Ousmane Ndiaye, which highlighted his intervention in the case of ASPRODEB. A reminder of events enlightened participants on the evolution of the farmer based movement from 1960 – 1976, where the State tried to organize producers, through peaceful coexistence between the Government and agricultural producer organisations (OPA), through to the period of sensitization of these organizations, following the food crisis of 1976. The OPAs achieved 90% agricultural production which was further proof of their important role in the development of the agricultural sector. It is important to note the contribution of OPAs to the Research/Development process without expecting anything from the State. Mr Ndiaye stated that we must therefore build mechanisms for dialogue between OPAs and Research at the local, national, sub regional and regional level based on the principles of understanding, sharing and collaboration to enable science to circulate without restraint.

In the fifth presentation, the President of INTERFACE outlined the **role the private sector plays and the opportunities it offers to agriculture in Senegal**. INTERFACE, which is a development concept envisaged by African entrepreneurs for the SME-SMIs, is a think tank for exchange and actions which covers 14 countries in West and Central Africa (WCA) and is considered a response to development problems of a new generation of entrepreneurs faced by a liberal and global context. Madam Almeida indicated that the current state of the national agricultural sector is encouraging, with the obvious existence of political will. There is therefore the need to take advantage of the opportunity to make progress and change the paradigm. The latter relates to, among others, the possibility of technology transfer to move from laboratory to business with respect to renewable energy, organic inputs, the carbon credit market, hydroponics, recycling of waste water, mechanization and robotics. The role of the private sector should therefore be business creation and investment. An appeal was made to concerned actors to create an enabling environment for the development of SME-SMIs and the establishment of financing for Agro business enterprises.

The sixth and last presentation focusing on the **role of the university system in the promotion of the agricultural sector** was given by the Head of Research. The presentation brought to the fore presidential decisions on education and training with the aim of making higher education a lever of economic, social and cultural development. A presidential decision was taken to strengthen university education, promote access, diversify training courses offered and ensure the quality of higher education. An example is the city of knowledge, under construction, which aims at bridging the gap among higher education, research and society in order to promote innovation and business creation. In addition, LEAP AGRI, Oil Palm and the Senegal–South Africa Cooperation projects were presented and the Director of Research noted the change in our science culture and the evolution from research to business and trade.

2.2.2 Discussions

At the end of this second series of presentations, the key discussion points focused on:

- The importance of self-financing or of the contribution of actors in agricultural research and development such as what was initiated by ASPRODEB in order not to rely too much on the State.
- The definition of the private sector which is apparently misunderstood in the agricultural sector. Thus the wording adopted in the policies of regional communities and OHADA were recalled. Also, the private sector was defined as all the actors which invest their own resources in activities from which they seek benefits. Thus, cooperatives make up part of the private sector even if they are rightly or wrongly placed in the category of civil society actors.
- The involvement of private sector in higher education which will take effect in professional training institutions (particularly ISEP) according to the Director of Research.

2.3 Achieving Senegal's S3A vision

Following a brief introduction by the moderator and Dr. MUGABE on some principles (group balance among others) and objectives of the work to be undertaken in parallel sessions, four (04) groups were formed based on the following topics:

- **Group 1:** Creation of a favourable political environment for science (using the PPI)
- **Group 2:** Strengthening of human and institutional capacities on the use of science for agriculture
- **Group 3:** S3A implementation platforms at the national level and efficiency of modalities for collaboration at all levels (national, regional and international)
- **Group 4:** New plan for S3A knowledge management

The reports from each of these four topics were presented and discussed during plenary sessions.

2.3.1 Reports from working groups

Group 1, which worked on the **creation of a favourable political environment for science**, listed various policy documents at the Ministries of Agriculture (PSE, PRACAS, PNIA, LOASP etc.), of Livestock Farming (PNDE) and of Higher Education (Programme for the development of Higher Education). Group 1 also reviewed evaluation criteria with respect to modalities for financing and monitoring and evaluation of the implementation of S3A at the national level. In addition, it made proposals on strengthening the contents of the four thematic areas of the S3A programme.

In conclusion, group 1 made two (02) recommendations:

- Constitute groups which will work on policy evaluations between now and the first week of the month of August 2017 with ISRA in charge of implementation;
- Strengthen the capacities of groups which will be constituted with FARA in charge of implementation

Group 2, which worked on **strengthening of human and institutional capacities on the use of science for agriculture**, identified the need for institutional capacity strengthening (irrigation, transport, infrastructure among others) and human capacity strengthening (plant pathology, rural engineering, weed science etc.). This group also tried to outline the reasons for the gap in capacity strengthening and thus made recommendations to bridge this gap: adapt education and training policies to the needs of Agriculture; facilitate access to the factors of production; promote agricultural entrepreneurship etc. Furthermore, this group also addressed the issue of financing of the agenda and highlighted some weaknesses that must be rectified:

- Inadequate communication and dissemination of research results;
- Lack of coordination;
- Difficulties in the implementation of decisions;
- Weak link between research and extension;
- Political instability

After the plenary presentation of the report by group 2, some additions and modifications were made on the issue of financing. Thus it was proposed that international institutions should be taken into consideration and institutions such as CNAAS and Credit Agricole should be removed from the list of institutions which must ensure financing at the national level. In addition to this, it was suggested that the group takes out «water storage» from the key areas where there is the need for capacity strengthening.

Group 3, which worked on **S3A implementation platforms at the national level and efficiency of modalities for collaboration at all levels (national, regional and international)**, defined the notion of PI, in the specific framework of S3A as being an examination of science for agricultural use. To do this, a historical analysis of frameworks and other initiatives were used to identify the CLPA on fisheries, the trade association of the Tomato sector and Research Development units in agro ecological zones; the weakness of these initiatives being market failure and monopoly of manufacturers. According to this group, prerequisite conditions for the success of a PI must have a connection with: the existence of a secure market place, abundance and diversity of actors, a strong partnership with the State, a participative approach, demand-based pilotage, existence of organized structures and a self-financing strategy.

Recommendations were made to avoid multiple frameworks, to capitalise on existing initiatives, promote success and, depending on existing frameworks, take charge of the vision outlined through innovation platforms and develop a clear strategy and action plan involving all the stakeholders.

After the presentation of the dataInforms platform developed by FARA, Group 4, which worked on **new plan for S3A knowledge management**, identified information portals of ISRA, ITA, e-rails etc. It emerged from their work that regular update, ease of use, easy access and relevance of online data remain the key reasons for high interest in an information platform. To facilitate the exchange of information in the S3A framework, it was decided, among others, to establish a network, sensitize and train managers at the system's focal points and propose an AWPB. It will also be necessary to have the most detailed data possible. With respect to the sustainability of such a knowledge management system, there must be institutional attachment as well as human and financial resources.

2.3.2 Discussions

At the end of the presentation of reports of working groups on the achievement of Senegal's S3A vision, the key points of discussion focused on:

- Consideration of post-harvest activities and of the change in production which is supposed to be as a result of capacity strengthening of stakeholders
- Proven existence of a link between research and extension, particularly with the role being played by the SNRASP;
- Capitalization of stock-taking works of PI and consultative frameworks of Senegal, already attained by PAPA and the consideration of university consultative frameworks;
- Consideration of information platforms already in existence such as ECOAGRIS and the CLM Database
- Recourse to social science such as rural sociology to facilitate the scale up of technologies and innovations and the need to reflect on the certification of agricultural knowledge.
- The importance of knowledge management which, besides being a profession on its own requiring competent human resources, is different from monitoring and evaluation. Thus it is important to disseminate knowledge to producers.
- The consideration of aquaculture in strengthening capacities since it is currently an alternative for youth employment and revenue growth.
- The need to harmonise and centralise data in the fisheries sector as well as other sectors.

2.4 Change theory and results framework for the implementation of S3A in Senegal

In this part of the workshop, there was only one presentation on the change theory, which was followed by group work. Discussions were held on the outcome of the group work.

2.4.1 Presentation on change theory

Mr Enock WARINDA of FARA gave a presentation on the concepts and strategy for outlining a change theory. It was aimed at enabling all national stakeholders present at this workshop to have the necessary and adequate information to adapt to Senegal's context. Within this momentum, the basic principles of change theory and its application in the S3A were, to a large extent, discussed.

Change theory, initiated in 1970 and implemented in 1990 has the objective of regulating problems encountered by stakeholders on the monitoring and evaluation system with respect to the impact of social projects, the weak relationship between assumptions/risks, the lack of clarity of the change process on long term results. Thus, it is considered as a process for analysis and learning to support the conception, the implementation and the evaluation of development projects and programmes. In addition, it facilitates the mapping of the trajectory of change and the constitution of a measurement framework focused on understanding what must be attained, what is measured and the method of measurement.

Subsequently, the difference between the logical model and change theory was analysed. If the former gives a graphic summary on the results, resources and activities; the latter, beyond this aspect, is interested in the manner in which these elements are linked to produce change. In addition the logical model is more widely used in the summaries of programmes while the change theory remains more interesting and complex for a rigorous evaluation and planning.

A comparison portraying alignment between the results framework of CAADP and that of S3A has also been done. This enabled all stakeholders to see the level of coherence of regional programmes.

2.4.2 Group work on change theory

First of all Mr Enock advised the groups to take inspiration from the model provided during the presentation on change theory in order to do the same alignment of S3A with the national programmes in their work. Thus, based on the four (4) topics, five (5) groups were constituted in line with the table in Annex 1.

The work was carried out in two steps based on two series of questions captured in the table in annex 2.

The outcome of the work of each group were reported during the plenaries and the tables in annex 3 and 4 give the essential elements for developing a change theory for Senegal.

3 Recommendations

After deliberations during the S3A workshop, the following recommendations were made:

- Reflect on self -financing mechanisms or contributions from stakeholders for agricultural R&D and not rely on contributions from the State;
- Establish working groups tasked with evaluating policies from now till the first week of August 2017 with ISRA as lead implementing institution;
- Strengthen the capacities of the groups that will be formed with FARA as lead ;
- Within the framework of S3A capacity building, stress on post-harvest activities and the transformation required to boost production;
- Reflect on how to obtain certification or a formal recognition of the know-how of the farmer;
- Continue to take stock of existing consultative frameworks or platforms. It is recommended, among other things, to contact universities and PAPA who have already capitalized on outcomes in that area;
- Put in place a network, create awareness and train managers or focal points of the system to facilitate exchange of information with regards to S3A (AWPB to be elaborated) ;
- Ensure to have data as desegregated as possible to feed into various information platforms;
- Ensure institutional integration and secure the adequate human and financial resources needed to sustain the knowledge management system ;

- It was further recommended to avoid multiple frameworks, capitalize on existing initiatives, value the success, make use of existing frameworks and own the vision as described through innovation platforms as well as develop a clear strategy and an action plan involving all stakeholders.

4 Closing Ceremony

During the closing ceremony of the workshop remarks were made by the following people: Dr Kodjo Kondo of CORAF/WE CARD, Dr Jonas Mugabé of FARA and Dr Alioune Fall, Director General of ISRA.

The representative from CORAF/WE CARD expressed his appreciation for the organisation of this important workshop and thanked participants for their relevant contributions which would definitely guide the continuation of the process.

The representative of FARA's Executive Director noted the dynamism of the participants which enabled the realisation of all the objectives of the workshop within 3 days instead of the 5 days it should have been. He expressed thanks to ISRA for organising and hosting the meeting and CORAF/WE CARD for its collaboration. Furthermore, Jonas Mugabe reminded participants that the change theory remained a process which requires the commitment of all stakeholders and that activities should therefore not cease after the close of the present workshop.

The Director General of ISRA, in his closing speech on behalf of the Ministry of Agriculture and Rural Equipment, expressed satisfaction regarding the proceedings and outcome at the end of the workshop. He admitted being proud of the choice of Senegal for the first phase of the S3A, which he stated was the result of collaboration between various components of rural development. The great results obtained by Senegal within the framework of WAAPP represent a clear example of the determination of local stakeholders. He thanked CORAF/WE CARD for coordinating the programme regionally. As the DG of ISRA, he pledged to disseminate the information to national stakeholders who will be captured based on the relevant thematic areas. In conclusion he thanked the participants, FARA, CORAF/WE CARD as well as the organising committee for the success of the meeting before declaring the national consultative meeting on S3A, closed.

The moderator: Dr Ndiaga Mbaye (Consultant)

Rapporteurs: MM Lamine Gaye (ISRA) & Mamadou Moustapha Lo SAMM (CORAF/WE CARD)

Annexes

Annex 1: Table on the Distribution of Groups According to the 4 S3A Thematic Areas

Subject	Specific Activities/Goals	Groups
Sustainable productivity of the main agricultural systems	Transformation of the systems of production	GROUP 1
	Crop improvement and protection	
	Improvement in the production and productivity of stockbreeding	
	Fishing and aquaculture systems	GROUP 2
	Agroforestry and forestry	
	Agricultural mechanization	
Food systems and value chains	Food and nutritional security	GROUP 3
	Food processing	
	Food security and storage	
	Post-harvest processing, processing and storage	
Agricultural biodiversity and natural resource management	Preservation and strengthening of agricultural biodiversity	GROUP 4
	Land and water resources, irrigation and integrated natural resource management	
Main trends and challenges facing agriculture in Senegal	Climate change, variability, adaptation and mitigation	GROUP 5
	Policy and institutional research, including access to markets and trade	
	Reponses to changes in the means of subsistence of rural communities	
	Gender	

Annex 2: Issues Handled by the Groups in Accordance with the 4 S3A Thematic Areas

N°	First Series of Questions	Second Series of Questions
1	What is the current situation in Senegal?	Who are the key stakeholders?
2	What are the underlying causes of the current constraints?	Which target groups are likely to ensure the attainment of the objectives?
3	What must change through the S3A?	Which activities do we need to attain the objectives?
4	How will these changes be effected through the S3A?	Which are the main assumptions to be taken into account?
5	Which internal and external constraints are likely to affect them?	What are the short-term outcomes?
6		What are the success indicators?
7		What are the long-term outcomes?
8		What are the success indicators?

Annex 3: Consolidation of the Group Work based on Table 1

Subjects	Activities/Specific Objectives	What is the current situation in Senegal?	What are the underlying causes of the current constraints?	What needs to change through the S3A?	How will these changes be effected through the S3A?	Which internal and external constraints are likely to affect them?
Sustainable productivity in the main agricultural systems	Transformation of the system of production	Two systems: Family farming system (dominant but not effective) Agro-business system (in the start-up phase)	Family System: Low investments Poor application of technical itineraries Low proportion of farmed lands (Land) Climatic constraints Environmental degradation (land degradation, degradation of forest cover, etc. Poor access to and availability of quality inputs (certified seeds, fertilizer...)	Family System Know-how Mode of transmission of knowledge (training, extension, consultancy support) Change approach to the supply of inputs Change farming and land management practices Agro-business	Capacity strengthening Facilitate access to information Facilitate access to quality inputs Make a case for the application of the ADHOC Lands Commission	Family System Policy Climatic change (risks and vagaries)

			<p>Granting of unsuitable credit facilities</p> <p>Agro-business</p> <p>Poor involvement of national private entities</p> <p>Difficult access to land</p> <p>Lack of an assistance policy (development investments)</p>	Mode of establishment (Terms and conditions)		
	Crop improvement and protection	<p>Existence of national protection structures protection (but which only cater for the major pests)</p> <p>Lack of practical means and measures</p> <p>Lack of a framework for consultants with border countries</p> <p>Lack of knowledge on standards</p>	<p>Lack of knowledge on standards dealing with phytosanitary protection</p> <p>Lack of resources on the part of national structures (DPV)</p> <p>Lack of resources on the part of farmers</p> <p>Lack of product control</p> <p>Poor capacity strengthening</p>	<p>Implementation of the protection policy</p> <p>Framework for cooperation between neighbouring countries (modalities for contribution)</p> <p>Exchange of information and modes of control</p> <p>Framework for cooperation between neighbouring countries (modalities for contribution)</p>	<p>Meetings</p> <p>Advocacy</p> <p>Strengthening of resources</p>	<p>Mechanism is cumbersome and difficult to be put in place</p> <p>Inadequacy of human resources</p>

				Exchange of information and modes of control		
	Improve livestock production and productivity	<p>Inadequacy of the production of meat and milk</p> <p>Difficulty in the preservation of dairy products</p> <p>Problem of livestock feed</p> <p>Lack of space for grazing</p> <p>Cattle rustling</p> <p>Weakness in value-addition for livestock products</p> <p>Lack of training of stakeholders</p>	<p>Lack of livestock feed</p> <p>Isolation of milk producing areas and inadequacy of logistics</p> <p>Bush fires</p> <p>Inadequate grazing</p> <p>Lack of resources and organization for the procurement of concentrated feed</p> <p>Lack of a land policy</p> <p>Lack of security and illegal slaughtering</p> <p>Inadequate funding</p> <p>Inadequacy of the dairy product value addition policy</p> <p>Inadequacy of training opportunities for stakeholders</p>	<p>Mode of involvement of and information for stakeholders on</p> <p>Livestock management</p> <p>Livestock-related infrastructure</p> <p>Mode of securing livestock</p>	<p>Strengthening of the capacity of stakeholders</p> <p>Strengthening of the short-term participation of livestock stakeholders in the taking of major decisions</p> <p>Increasing investments allocated to the sector to improve equipment and infrastructure</p> <p>Rigorously applying the prevailing regulations</p> <p>Improving collaboration between the security forces and leaders of the FOs</p>	<p>Internal organizational problems</p> <p>Divergence in the approach to certain programmes</p>

	<p>Aquatic and fishing systems</p>	<p>Fishing</p> <p>Overfishing of demersal stocks</p> <p>Signed fishing agreements (tuna, hake)</p> <p>Difficulty in controlling ships for industrial fishing</p> <p>Sustainable fish resource management dynamics (biological recovery, marine protected areas, ...)</p> <p>Demersal species, supply of the international market to the detriment of the local market</p> <p>On-going aquaculture dynamics (ANA, aquaculture farms) as alternatives to fishing</p>	<p>Overcapacity of small-scale fishing (unrestricted access)</p> <p>Signing of agreements meets socio-economic and political needs</p> <p>Attractiveness of international markets to the detriment of the local market</p> <p>Rudimentary nature of equipment (canoes, ...)</p> <p>Difficulty in access to aquaculture inputs (fry, feed, prophylaxis, technological itineraries)</p> <p>High cost of basic infrastructure and difficulty in access to funding</p>	<p>Proper supply of the internal market through better management and adequate control</p> <p>Improvement in fishing equipment and techniques (standard canoes and nets)</p> <p>Empowerment of stakeholders (training, supervision, extension)</p> <p>Assumption of responsibility of the State for basic infrastructure and Facilitation of access to credit</p> <p>Introduction of suitable training curricula</p>	<p>Knowledge of market needs</p> <p>Access to products by consumers</p> <p>Implementation of appropriate management measures</p> <p>Access to modern and suitable equipment</p> <p>Training of stakeholders and Organization of the sub-sector</p> <p>Facilitating access to credit through the introduction of dedicated windows</p> <p>Fulfilling the commitment of the State</p> <p>Facilitating access to basic infrastructure</p> <p>Facilitating access to inputs</p>	<p>Institutional and international market instability</p> <p>Sub-regional geopolitics</p> <p>Lack of control over sources of funding</p> <p>Climatic Change (CC)</p>
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		Acquisition of research				
	Agroforestry and forestry	<p>Serious degradation of forest resources</p> <p>Effort towards diversification (reforestation, domestication, declaration as reserved areas , degazetting of old-growth forests)</p> <p>Developments (protected areas)</p> <p>Creation of eco-villages</p> <p>Development of the PFLNL (Contribution to GDP)</p> <p>Acquisition of research</p>	<p>Overutilization, poaching, bush fires, extension of cultivated areas, mining</p> <p>Land pressure</p> <p>Poor involvement of grassroots stakeholders (poor sensitization and empowerment)</p> <p>Poor natural regeneration</p>	<p>Sustainable resource management</p> <p>Intensification of and improvement in agricultural production</p> <p>Promotion of Natural Protected Areas and the RNA</p> <p>Introduction of suitable training curricula</p>	<p>Sensitization, empowerment and organization of stakeholders and sub-sectors</p> <p>Transformation and development of the PFLNL</p> <p>Introduction and reintroduction of suitable species (Multiple uses)</p>	<p>CC</p> <p>Institutional instability</p> <p>Sub-regional geopolitics</p> <p>Lack of control over sources of funding</p>
	Agricultural mechanization	Obsolescence of agricultural equipment	<p>Unsuitable equipment for agro-ecological zones</p> <p>Lack of quality control</p>	Introduction of a national mechanization strategy	Establishment of an interest subsidy fund (high interest rate, ...)	<p>World prices</p> <p>Institutional instability</p>

		<p>Poor handling of maintenance and replacement</p> <p>Hesitant introduction of motorization</p> <p>Poor level of mechanization</p> <p>Acquisition of research</p>	<p>Lack of qualified HRs</p> <p>Poor access to equipment on the part of farmers</p> <p>Problem of maintenance and repair</p> <p>Inadequacy of funding mechanisms</p> <p>Problem of coordination of the agricultural policy</p>	<p>Introduction of a monitoring and evaluation mechanism</p> <p>Empowerment of small holders</p> <p>Facilitation of access to equipment</p> <p>Introduction of suitable training curricula</p>	<p>Introduction of training curricula in agricultural machinery</p> <p>Strengthening of the capacity of small holders</p> <p>Provision of maintenance equipment and modern machinery for small holders</p> <p>Introduction of after-sales services</p>	<p>Sub-regional geopolitics</p> <p>Lack of control over sources of funding</p>
Food systems and value chains	Food and nutritional security	Not yet effective (export < import; poor purchasing power; regional disparities; etc...)	Poor level of use of technological innovations (water and land management, seeds, rudimentary mechanization, capacity strengthening gap ...)	Large-scale promotion of appropriate and sustainable technologies and innovations; Strengthening of the existing Value Chains (VCs); Strengthening of the capacity of the VCs;	Inclusion of proposals in the PNIASAN currently being formulated; Strengthening of the inter-ministerial mechanisms for the coordination of the SAN programmes	Commitment of the authorities; Availability of Resources; Security Crises; Pests, etc.
	Agro-food processing	Strong dynamism of processing, but the sub-sector is dominated by small	Inadequate institutional strengthening (financial and technical engineering) of micro-	Including the food processing component in our policies; providing assistance for the	Inclusion in the PNIASAN	Commitment of the authorities; Availability of resources; Food

		holders (packaging, stability of products, technologies, ...)	enterprises, SMEs, SMIs and big businesses; Difficulty in moving from the small-scale level to the industrial level; Access to Markets;	transition from the small-scale level to the industrial level		Crises; Pests, etc.
	Food security and storage	Post-harvest losses; Health qualities of products (Aflatoxin, use of pesticides on processed fish products), compliance with storage standards	Ineffectiveness of quality health control systems , Lack of sanctions for offenders	Political will; Strengthening of pressure groups (Consumers' Association, Media); Ethics/Private Sector, Training – Information and Communication- Sensitization of Farmers, Processors and Consumers	Inclusion in the PNIASAN	Commitment of the authorities; Availability of resources; Food Crises; Pests, etc.
	Processing, post-harvest processing and storage	Post-harvest handling, Processing and Storage	High post-harvest losses; High rate of pesticide residue in foodstuffs; Inadequacy of the diversification of packaging possibilities (quality-cost ratio)	Gap in the application of technological innovations; Non-compliance with standards (pesticides, vaccines, hormones); Lack of sanctions for offenders, ...	Promotion of Organic/Ecological Farming, Regulation of the Sector; Control and Application of sanctions	Inclusion in the PNIASAN

Agricultural biodiversity and natural resource management	Preservation of improvement in agricultural biodiversity	1. Existence of structures which manage biodiversity issues (i) State MEDD (Parks Department) MAER (ISRA) MEPA MPEM MIN (ITA) (ii) International Bodies IUCN WWF (iii) Universities (Fac. of Science, IFAN, Fac. of Med. and Pharmacy) (iv) CGIAR AfricaRice 2. Existence of enactments governing the	(i) Climate change (ii) Non-ownership of enactments (iii) Anthropogenic activities (Pressure on resources)	Contribute to the removal of constraints	Better governance, advocacy for increased sensitization on the environmental and social culture, strengthening of scientific and technical research	-Internal: Lack of political will -External: Non-fulfilment of commitments by technical and financial partners
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		<p>management of biodiversity (LOASP, law on biosecurity, forestry code, environmental code, water code...</p> <p>3. Existence of sites:</p> <p>Parks</p> <p>Great Green Wall</p> <p>Marine protected areas</p> <p>Constraints</p> <p>1. Institutional level</p> <p>(i) Institutional changes</p> <p>2. Regulatory level</p> <p>(i) Non-compliance with laws and regulations</p> <p>3. Level of the sites</p> <p>(i) Degradation of natural ecosystems</p>				
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	Land and water resources, irrigation and management of integrated natural resources	Water resources and irrigation: Availability (Ocean, rivers, lakes, retention basins, aquifers...) Land resources: Availability Management of integrated NRs: OMVS, OMVG, MH, local authorities Constraints Difficulty in accessing water Salinity of the water and land Land degradation Land pressure	(i) Depth of the aquifer (ii) Cost of the use of water (iii) Intrusion of salt-laden water (iv) Water contamination (iv) Population explosion (v) Land speculation	Contribute to the removal of constraints	Assess the research outcomes which will ensure a better understanding of the salt-laden water intrusion process and the contamination of water Formulate and introduce a programme for the dissemination of the research outcomes which will ensure a better understanding of the salt-laden water intrusion process and the contamination of water	Internal: Lack of political will External: Non-fulfilment of commitments by technical and financial partners
Trends and challenges faced by	Climate change, adaptation and mitigation	Senegal has developed institutional	Limited resources (financial, human and infrastructural);	More resources for implementation;	Allocate substantial resources for the implementation of strategies;	Internal: Institutional stability

agriculture in Africa		(COMNACC, GTP), policy (resilience strategy, PANA, CNIS/GDT), financial (green fund) and technical (infoclim, GDT technologies, resilient varieties) instruments,	Institutional framework yet to be formalized; Poor coverage of the country by the GTP committees	Formalize and make the institutional framework operational;		External: Instability in the border countries; Availability of financial resources Occurrence of natural disasters;
	Policy and institutional research, including access to the market and trade	PSE/PRACAS, PNDE, PNIASAN, sectorial policy letters (industry, fishing, livestock, environment, etc.) Regional and international trade agreements	Poor inter-sectorial coordination	Improve inter-sectorial coordination	Ensure the functionality and effectiveness of existing frameworks	External: Tariff and customs barriers Application of legislations and regulations
	Responses in changes in the means of subsistence of rural communities	Farming practices and innovations (micro-credit, lairage, conservation agriculture, etc.)	Vulnerability to climate change Reluctance to accept innovations	Improve availability of and accessibility to CC-resilient technologies Promote the exchange of innovations/technologies	Organize fora, exchange visits, fair, web platform, etc. Strengthen collaboration between	Internal: SNCASP is not functional

					research and consultancy	
	Gender	Law on parity National Strategy for gender equity and equality Social orientation law	Social bottlenecks	<i>Inclusion of gender in policies and programmes</i>	<i>Gender-sensitive planning and budgeting</i>	<i>Internal: Taboos and socio-cultural aspects</i>

Annex 4: Consolidation of Group Work Based on Table 2

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
Sustainable productivity within the main agricultural systems	Transformation of the system of production	Research, FOs, extension, private sector and the State	FOs and the private sector	The new technology generation, Dissemination of technological innovation; Provision of quality inputs and adequate equipment;	Provision of financial and human resources for research; Existence of a good strategy for the dissemination of research outcomes; Existence of adequate seasonal credit;	Number of technologies and innovations; Quality inputs are available	Number of farmers who have adopted these innovations; % of quality inputs placed at the disposal of farmers (certified seeds, agricultural	Contribution to the increase in production

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
				Strengthening of the capacity of stakeholders	Fresh boost and sustainability of the training and refresher programmes centres for agricultural trades		equipment, etc.)	and production
	Improvement in and protection of crops	Research, FOs and private sector	Private entities, the DPV	Research, phytosanitary processing, capacity strengthening, control and monitoring of diseases and attacks	Availability of material, human and financial resources	Reduction in attacks and diseases	% of surface area not affected by diseases	Eradication of diseases caused by insect pests

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
	Improvement in livestock production and productivity	The State, FOs, private sector, research/extension	FOs, private sector, research	Strengthening of the capacity of stakeholders; provision of adequate resources to the main stakeholders; improvement in infrastructure and strengthening of logistics	Political will of the State, existence of sound cooperation between stakeholders	Improvement in the livestock system, Better visibility and understanding of stakeholders	Number of meetings, exchanges and shared experiences among all the stakeholders of the system	Improvement in the income of farmers, reduction of imports

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
	Aquatic systems and fishing	Fishermen Fish and sea food wholesalers Processors Industrialists Administration and training and research structures NGOs, CLPA, PTF	Fishermen Fish and sea food wholesalers Processors Industrialists Administration and training and research structures NGOs, CLPA, PTF	Supply the domestic market (better management and adequate control) Improve equipment and fishing techniques (standard canoes, nets) Establish basic infrastructure (The State)	Distribution, preservation and political will Membership of stakeholders and financial institutions	Fishing and aquaculture products are available and accessible on the domestic market Fishing is rationalized The safety of fishermen is assured (Reduction in accidents)	Rate of supply Catch and consumption rate Consumption <i>per capita</i> Fishery resource rent Number of functional grassroots organizations	Stocks and regeneration Food security in fisheries aquaculture products assured Contribution to GDP increase Quality available

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
				<p>Facilitate access to credit</p> <p>Strengthen the capacity of stakeholders (training, supervision, extension,)</p> <p>Introduce suitable training curricula</p>		<p>Stakeholders are better organized and their capacity has been strengthened</p>	Number of promotions	

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
				(multi-disciplinary research)		Suitable curricula have been formulated and implemented		
	Agroforestry and forestry	Forest loggers Processors Industrialists	Forest loggers Processors Industrialists	Promote the TAF and TGDT Introduce suitable training curricula	Ownership of technologies	The yields of forestry and agroforestry systems have improved	Yield variation Number of TAF and TGDT	Equilibrium of the restored ecosystems

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
		Administration, training and research structures, NGOs, FOs, PTF	Administration, training and research structures, NGOs, FOs, PTF			The TAF and TGDT are being applied. Suitable curricula have been formulated and implemented.	technologies implemented Number of trained stakeholders	
	Agricultural mechanization	Farmers Dealers Craftsmen Industrialists Administration, Training and	Farmers Dealers Craftsmen Industrialists	Establish a national mechanization strategy Introduce a monitoring and	Political will and mechanism for the funding of	A national mechanization strategy has been formulated	Policy document	Supply system has been mastered

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
		research structures ONG, OP, PTF	Administration, Training and research structures NGOS, foS, PTF	evaluation mechanism Strengthen the capacity of craftsmen Facilitate access to equipment Formulate suitable training	agricultural equipment	Checking of imported equipment has been effected Local craftsmen are better prepared to handle agricultural equipment Farmers have access to	Number of trained craftsmen Number of promotions Number of functional committees	

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
						agricultural equipment Suitable curricula have been formulated and implemented		
Food systems and value chains	Food and nutritional security	See list of stakeholders on the concept paper of this workshop	Farmers, FOs, Private Sector (inputs, processing, trade, transporters, ...),	Large-scale promotion of appropriate and sustainable technologies and innovations; Strengthening of	Commitment of the authorities, Availability of resources, Security	Technologies and innovations suited to the various systems of farming are known and recorded;	Number of available technologies (disaggregated by farming and agro-ecological	Yields of main crops will double by 2030; Incomes

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
			consultancy support services, Teaching and Research Institute	existing value chains (VCs); Strengthening of the capacity of VCs	crises, Pests, etc.	80% of farmers know technology; 60 % apply T&Is;	system); Percentage of farmers who know technology; Percentage of farmers who apply T&Is;	increase 50%
	Agrifood processing	Senegalese Bakers' Federation, Flour-milling Industries of Senegal, ITA, Associations,	SMMEs; SMII, EIG, Farmers, FOs ; Consumers; Consumers' Association (ASCOSN,	Assessment of the agricultural processing industry in Senegal; Structuring of the sector;	Market disfunctioning; Commitment of the authorities; Availability of resources,	An inventory has been carried out with a reference situation; statutory documents have been drafted and	No. of SMMEs, SMIs, EIGs actively involved in the value chains; Number of statutory	Quantitative processing products have increased at least 50% in t

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
		EIGs and Agro-food Enterprises (Fish, Milk, Juice, Jams, ...); ESP; ...	ADEC, ...), Supermarkets; ...	Strengthening of the institutional and technical capacity of governance organs; Strengthening of priority VCs of the PRACAS, and other competitive VCs (Fish farming, processed fish products); Improvement in the quality of products (health,	Security crises; Pests, etc.	governance organs have been put in place and provided with premises; procedural manuals and code of ethics have been formulated and amended; institutional managers have been given training on their	meetings; No. of extraordinary meetings; No. of short training sessions organized (disaggregated by subject; No. of seminars and symposiums (disaggregated by subject) No. of persons	targeted 100% reduction of the prevalence of diseases linked to quality of products; at least 80% of enterprises fulfil their commitments to provide products through

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
				nutritional, ...) ; Strengthening of the capacity of enterprises to meet the needs of the market (availability in terms of both quality and quantity throughout the year without any break in stocks)		roles and responsibilities.	trained (disaggregated by gender) No. of enterprises trained (disaggregated by type); Number of certified ISO enterprises	the year least 80 enterpri have ISO certifica Creation an S3A quality l

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
	Food security and storage	CERES LOCUSTOX ; Institut Pasteur; LANAC, etc.	SMMEs; SMIs, EIGs, Farmers, FOs; Consumers; Consumers' Association (ASCOSEN, ADEC, ...), Supermarkets; ...	Strengthening of quality control services; Institutionalization of licences in food production and processing; Determination of the legal levels of fines; Information Communication and Sensitization of farmers, agricultural processors and consumers on	Commitment of the authorities and political will; Availability of resources; Resistance to change, etc.	At least 60% of market garden, poultry, fish and meat livestock farmers are authorized (they have a licence); Effective financial autonomy of the control and certification departments; Information aids (Posters, Leaflets, TV	% of authorized farmers; % of operational budgets covered by generated receipts; No. of training programmes (disaggregated by subject); No. of trained persons (disaggregated by gender and	Reduction of public health expenditure by 30% in urban areas; Increase in life expectancy by at least 15%

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
				health quality standards (pesticide residue, vaccines, hormones; nutritional additives, etc...); Periodic refresher programmes for farmers, authorized processors and certification agents on the		Adverts and Radio) are produced and diverse dissemination channels are used; 100% of authorized processors are trained and given periodic refresher programmes on quality standards	type of organization; No. of consumers who know the standards.	

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
				trends of standards				
	Post-harvest handling, post-harvest processing and storage (added by Dr Traoré)	State Farmers Industrialists Craftsmen Traders	Same	Design of suitable equipment Building of post-harvest machine	Commitment of the authorities Participation of the private sector (industrial)	Fall in post-harvest losses Improvement in products	Increase in the yield of harvests and processed products	Increase in the value of Senegalese products

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
					Creativity of craftsmen			
Agricultural biodiversity and Natural Resource Management	Preservation of and improvement in agricultural biodiversity	(i) State MEDD (Parks Department) MAER (ISRA) MEPA MPEM MIN (ITA) (ii) Inter Org	-The State -Farmers organizations -NGOs -Local authorities	-Create synergies for activities carried to improve and preserve biodiversity.	- Non-fulfilment of commitments of stakeholders.	-Stakeholders are committed. -research outcomes ensuring a better preservation and improvement of agricultural biodiversity are known.	-Number of commitment and agreement letters signed -Number, Database available.	-Biodiversity has improved - Lands have been restored

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
		IUCN WWF (iii) Universities (Fac. of Science, IFAN, Fac. of Med. and Pharmacy) (iv) CGIAR AfricaRice (V) Farmers' Organizations and civil society						

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
	Land and water resources, irrigation and management of integrated natural resources	-Regional Structures OMVS ; OMVG ; - Ministries: MEPA, MAER, MEED, MESR, etc. -NGOs -Farmers' organizations	-The State -Farmers' organizations -NGOs -Local authorities.	Creating synergies for activities carried out to improve integrated natural resource management.	Non-fulfilment of commitments by stakeholders.	-Modes of management of natural resources are better articulated.	Number of modes of management of natural resources is articulated.	Integration of natural resources for better management.

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
Trends and challenges for agriculture in Africa	Climate change, adaptation and mitigation	Ministries (MEDD, MAER, MEPA, MPEM) COMNACC ANACIM, CSE FOs NGOs	FOs Research Institutions ISRA, ITA, INP, Univ) Agricultural Council (ANCAR, other stakeholders, SNCASP) EFAR	Strengthen capacity Embark on advocacy Sensitize and inform stakeholders Strengthen existing consultation frameworks	Availability and accessibility of financial resources Institutional stability	Consultation frameworks on on CC are functional Available T&Is are being used	Number of structures involved in the frameworks Number of meetings held Number of deliberations implemented Number of T&Is used	Communities are resilient to CC.

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
	Policy and institutional research, including market access and trade	Research Ministry of Trade Private sector National Assembly	Research Institutes Universities SNRASP ARM, ASEPEX, UNACOIS Employers	Articulate the objectives of the S3A to the PSE sector policy documents	Political will demonstrated by the authorities (PSE)	Market information systems are used by VC stakeholders. The introduction of agro-forestry-pastoral products onto the market has improved. The volumes of traded agricultural products have increased.	Number of functional SIMs Number of stakeholders using SIMs Volume of traded agricultural products	Incomes of stakeholders have improved

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
	Responses to changes in the means of subsistence of rural communities	FOs Local authorities Research Agricultural Council Territorial Administration Technical Departments	FOs City Councils ARD Territorial Administration	Sensitize grassroots stakeholders Train stakeholders on adaptation strategies	Existence of an agricultural consultancy department Availability of financial resources	Adaptation strategies have been mastered and applied.	Number of trained stakeholders Number of applied strategies Number of stakeholders implementing	Communities are resilient

Subjects	Activities/specific objectives	Who are the key stakeholders?	Which target groups will ensure the attainment of the outcomes?	Which activity do we need for to attain the objectives?	Which key assumptions should be taken into account?	What are the short-term outcomes?	What are the success indicators?	What are the long-term outcomes?
							at least one strategy	
	Gender	Ministries (Women, Youth, Agriculture, Social Work, etc.)	FOs Vulnerable Groups (Women, Youth)	Sensitize stakeholders on Gender Train stakeholders on Gender Apply the SNEEG	Respect of the application of gender laws and strategies Availability of financial resources	Gender laws and strategies are being applied.	Number of laws and strategies applied Number of persons sensitized on Gender Number of persons trained on Gender	Factorin Gender projects program is effect

