

**Research Analyst**  
**Agricultural Statistics and Economics**  
**Econometric Modeling**  
**Impact Evaluation**

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## Academic Training

- 2016- 2017 **Masters degree in Statistics and Econometrics (MSE)**, Cheikh Anta Diop University (UCAD)- Faculty of Economics and Managment (FASEG), CREFDES, (Dakar, Senegal).  
*Masters thesis on : "Proximity to markets and technical efficiency: case of millet farmers in Senegal"*
- 2010- 2014 **Engineer of Statistics (ITS)**, National School of Statistics and Economic Analysis (ENSAE), -, (Dakar, Senegal).  
*Bachelor Thesis on : "family farms and innovation adoption: an impact assessment using the propensity score matching"*
- juin 2010 **Baccalaureate in S1 (Specialized in Maths - Physis - Chemistry)**, Seydina Limamou Laye High School , Dakar (Senegal).

## Professional Trainings

- Oct 2019 **project-level Women's Empowerment in Agriculture Index (Pro-WEAI)**, Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) - Makerere University - IFPRI - Cornell University, (Kampala, Ouganda).
- Oct 2019 **Using mixed methods for Gender-sensitive Research - Gender sensitive breeding.**, Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) Cornell University - INERA - Makerere University, (Ouagadougou, Burkina Faso).
- Jan 2016 **Methodological Workshop on Value Chains approach by Pr Thomas Reardon of Michigan State University (MSU)**, ISRA/BAME - MSU - IFPRI, (Dakar, Senegal).
- Jan 2016 **Methodology of Monitoring and Analysing Food and Agricultural Policies (MAFAP)**, MAFAP & FAO, (Dakar, Senegal).
- Oct 2015 **Economic modelling in GAMS - Applied to agriculture production models**, IFPRI & ISRA, (Dakar, Senegal).
- Jan 2015 **Economic Analysis of Agricultural Value Chains**, ISRA , (Dakar, Senegal).
- Avr 2014 **Training Workshop on Impact Assessment**, DIME (World Bank) and Coraf/Wecard, (Dakar, Senegal).
- Mars 2014 **Training on Results-based management**, Coraf/Wecard, (Lomé, Togo).
- 2007-2009 **Alumni of the "Access Program"**, USA Embassy, (Dakar, Senegal), The English Access Microscholarship Program (Access) provides a foundation of English language skills to talented 13-20 year-olds through after-school classes and intensive sessions.

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## Competences

- **Management of Nationwide Statistical Surveys**, *Probabilistic sampling techniques - Development of data collection instruments - Mobile data collect applications - Survey management - Data cleaning and processing - Statistical and Econometric Analysis - Reporting - Database Management Systems.*
- **Agricultural Policy Analysis**, *Economic Analysis of Food and Agricultural Policies - Agricultural Value Chains Analysis - Agricultural and Pastoral Economics - Econometric modeling.*
- **Impact Assessment of Programs and Technologies.**
- **Gender Sensitive Agricultural Research.**
- **Design, implementation and monitoring-evaluation of agricultural policies and projects.**
- **Animation of multi-stakeholder innovation platforms.**
- **Writing of scientific, technical and administrative documents.**

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## Work Experience

- Since 2014 **Research Analyst - Senegalese Institute of Agricultural Research (ISRA)**, *Bureau of Socio-Economic and Macroeconomic Analysis.*
- 2020 - **Coordination of the study on the determinants of fertilizer demand** in the South Peanut Basin and the Senegal River Delta, with IFDC)
- 2020 - **Qualitative study on the impacts of the AMMA 2050 project** Conducting qualitative interviews with public decision-makers and Training on taking gender into account in development projects
- 2019 - **Impact Assessment of the "Food Security Support Project" (PASA)** in regions of Louga, Matam and Kaffrine (PASA-Lou-Ma-Kaf)
- 2019 **Impact Assessment of the "Support Program for Agricultural Development and Rural Entrepreneurship" (PADAER)**, funded by IFAD
- **Monitored the FTF Agricultural Policy Support Project (PAPA / MAER with IFPRI & MSU) at ISRA / BAME.** Member of the local analysis network . Responsible for all the databases that came out of the surveys. Designed all IT tools for collection with smartphones as well as sampling. Contributed to writing of research reports
  - **Irrigated Rice Surveys** Zone : Senegal River Valley et de l'Anambé, Sample size:750, Partners : PAPA/MAER-IFPRI-UCAD
  - **National surveys on agricultural land COPIL/DV** Zone : nationwide, Sample size : 3000, Partners: FAO
  - **Dry Cereal Surveys** Zone : nationwide, Sample size : 4500 , Partners : DAPSA, PAPA/IFPRI
  - **Surveys on Horticulture** Zone : Niayes, VFS, Sample size : 1500
  - **National Surveys on rural consumption** Zone : urban areas, Sample size : 2250, Partners : PAPA/MAER-PAPA/IFPRI
- 2017 - **National surveys on rural land use COPIL/DV** Zone : nationwide, Sample size : 3000, Partners : FAO
- 2016 - **Surveys Management of MSF(Middle Scale Farmers)in partnership with Michigan State University, University of Pretoria and CIRAD** Conception of data collection instruments, Development of mobile data collection applications, sampling, datas cleaning and analysis. Sample size 10 000 households (1st stage) and 2000 households (2nd stage)

- 2014-2016 - **Monitoring & Evaluation officer at a Regional level of the AgriFam project (Coraf/Wecard)** including Senegal (millet & sorghum), le Mali(rice), Burkina Faso(sorghum), le Niger(cowpea), le Bénin(yam) et le Togo(maize). Submitted trimestrial reports . Tracked Project Key Performance Indicators. Conceived sampling and data collecting processes for baseline surveys. Participated to Policy briefs. Took part to regional workshops of methodological harmonization and planning. Carried out monitoring missions in 6 countries of the project (Mali, Burkina Faso, Niger, Benin, Togo and Senegal). Animated the Innovation plateform of Kaffrine (central Senegal). Frequently met (sensitized) policy makers, local officials and technical services...
- 2014-2017 - **Monitoring & Evaluation officer at a country level of the PFNL/4P (Coraf/Wecard)** project including Senegal, Burkina Faso, Cameroun, Gabon and D.R. of Congo .Submitted trimestrial reports . Tracked Project Key Performance Indicators. Participated to Policy briefs. Took part to regional workshops of methodological harmonization and planning. Carried out monitoring missions in Eastern Senegal. Animated the Innovation plateform. Frequently met (sensitized) policy makers, local officials and technical services.
- **Focal point of the National Statistical System (SSN) at ISRA.** Member of the Technical Committee of Statistical Programs (CTPS). Represents ISRA at SSN meetings.
- 2015-2017 - **ISRA/BAME Analyst for the Monitoring and Analysing Food and Agricultural Policies (MAFAP) program in Senegal (SAPAA)** with FAO and DAPSA: "Analysis of price incentives for beef in Senegal for the period 2005-2013 using the MAFAP methodology based on the Policy Analysis Matrix (PAM)".
- **Participated to research activities of the MTT / climate change project.** Support in data cleaning and analysis for the implementation of the agricultural model under GAMS. Collaboration with IFPRI-Washington researchers and Luke University for the implementation of the model in the Groundnut Basin
- **Participated to the establishment of agricultural economic accounts with DAPSA and IFPRI.** Implementation under STATA.
- **Participated to the PEBAP / BMZ** research project in cooperation with the universities of Kiel and Hohenheim. Translation of the project's policy briefs from English to French. Translation of the web tool developed as part of the project. Support in the use of the toolkit by the decision-makers participating in the results-sharing seminar.

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## Publications / Scientific Documents

**Article**, Dieng A., Ngom D., Dia D., **Sy M. R.** (2019) : *Efficiencce technique de la production d'anacarde (Anacardium occidentale L.) dans les grandes régions de production du Sénégal. Int. J. Biol. Chem. Sci. 13(6): 2627-2645.*

**Article (ongoing)**, Faye, N.F., **Sy, M.R.**, Kane, P.A., Bourgoïn, J., Zagré, R.R., Chery, J-P. (2020):*Proximité aux marchés et effiencce technique des exploitations familiales de tailles moyennes : cas des producteurs de mil au Sénégal .*

**Research Report**, **Sy, M.R.**, Bayo, F., Fall, T., Fall, C.S. (2020) : *LEAP-Agri WAgrinnova "co-construction avec les acteurs d'innovations pour renforcer l'intensification durable, la résilience, la sécurité alimentaire et nutritionnelle dans les agrosystèmes à maitrise d'eau en Afrique de l'ouest", Rapport Etude de Référence, 32p..*

**Research Report**, Faye, N.F, Magne, L., **Sy, M.R.**, Ndiaye, D., Sakho, M., Savadogo, K., Spielman. D. (2019) :*Structure et opération du système semencier au Sénégal. Rapport du projet PAPA, 34p..*

**Research Report**, Faye, N.F, Magne, L., **Sy, M.R.**, Ndiaye, D., Sakho, M., Savadogo, K., Spielman. D. (2019) :*Adoption et utilisation des variétés améliorées au Sénégal : cas céréales et légumineuses. Rapport du projet PAPA, 30p. .*

**Research Report**, Faye, N.F, Barro, S., Ndiaye, D., Ndongo, M., Zagré, R.R., Mané, C.S.A, Khadim Dia, **Sy, M.R.**, Dièye, M, Reardon, T. (2019). *La vente au détail des céréales sèches au Sénégal. Rapport du projet PAPA, 33p.* .

**Article (ongoing)**, Jahel Camille, Assouma M. Habibou, Taugourdeau Simon, Degenne Pascal, Castets Mathieu, Lo Seen Danny, **Sy, M.R.**, Diop Djibril, Bourgoïn Jérémy, Camara Astou (2019): *How to model moving farming systems? : The case of transhumant breeders in northern Senegal.* .

**Technical Sheet**, Diouf F. B. H., Sall M., Dia M., **Sy M. R.**, Traoré A., Ciss I., Badiane D., Diallo Nd. H., Fofana A. (2019): *Cadre méthodologique pour effectuer des enquêtes chez les producteurs dans la zone cotonnière sénégalaise. Vol. 48, N1- Série Fiches Techniques ISRA - ISSN 0850-99800.* .

**Article**, Manga A., Dia D., Faye N. F., Touré K., **Sy M. R.**, Mbaye T., Sarr M. N, Diallo A., Sow M., Diouf A. (2016) : *Contraintes de production de produits forestiers non ligneux au Sénégal : des solutions face à l'incertitude de l'offre et de la demande. In Spécial hors-série n°3- décembre 2016, Science et technique, Lettres, Sciences sociales et humaines. pp 63-75.* .

**Article**, Mbaye T., Dia D., Touré K., Faye N. F., **Sy M. R.**, Manga A., Sow M., Diallo A., Sarr M. N, Diouf A. (2016) : *Stratégies de gestion durable des PFNL face aux menaces sur la ressource : cas des régions de Tambacounda et de Kédougou au Sénégal. In Spécial hors-série n°3- décembre 2016, Science et technique, Sciences naturelles et agronomie. pp 11-21.* .

**Article**, Mbaye T, Touré K, Dia D, **Sy M. R.**, Faye N. F, Manga A., Diallo A., Sow M., Sarr M. N, Diouf A. (2016) : *État de dégradation des ressources naturelles et accessibilité aux services écosystémiques : cas des Produits Forestiers Non Ligneux dans les régions de Tambacounda et de Kédougou au Sénégal. In Spécial hors-série n°3- décembre 2016, Science et technique, Sciences naturelles et agronomie. pp 70-81.* .

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## Teaching Experience

- since 2018 **Agricultural Statistics**, National School of Statistics and Economic Analysis (ENSAE), Audience : *Statistician Engineers and Technicians (ITS), (Dakar, Senegal).*
- 2019 **STATA for Statistics and Econometrics**, Gaston Berger University , Audience : *Phd students of Economics , (Saint-Louis, Senegal).*
- 2019 **Sampling Theory** , Research Institute in Economics and Statistics (IRES) - Dakar School of Economics , Audience : *Master in Econometrics and Applied Statistics (ESA), (Dakar, Senegal).*
- 2018 **Advanced Excel and Sampling Techniques** , for Ministry of Agriculture / PAPA Project / IFPRI/ MSU , Audience : *rural development agents (2018), Saly, Senegal.*

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## Masters Co-Supervisions

- (2020) **Organizational innovations and technical efficiency: a multi input- multiput output approach in the Senegal River Valley**, Ongoing Master Thesis of Aubin Hadamou Abdoulaye (Cameroon), for the diploma of engineer in statistics at National School of Statistics and Economic Analysis (ENSAE).
- (2019) **Network analysis of the methods of supplying millet and peanut seeds in Senegal**, Thesis defended by Xavier Beogo (Burkina Faso), for the diploma of engineer in statistics at National School of Statistics and Economic Analysis..
- (2019) **Technical efficiency of farmers in the Senegal river valley: Evidence from rice, onion and tomato** , Thesis defended by Aldo Jean-Jacques Affenou (Benin), for the diploma of engineer in statistics at National School of Statistics and Economic Analysis..
- (2018) **Analysis of the determinants of the efficiency of maize farms in Senegal.**, Thesis defended by Philippe Démbélé (Mali), for the diploma of engineer in statistics at National School of Statistics and Economic Analysis.

(2017) **Analysis of the productive performance of Middle Scale Farmers in the Senegal River Valley .**, Thesis defended by *Samba Cissé (Senegal)*, for the diploma of engineer in statistics at *National School of Statistics and Economic Analysis.*

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## Computer and programming Skills

**Statistics & Econometrics** STATA, R, Python, SPSS, Eviews, GAMS.

**CAPI tools** ODK, SurveyCTO, KoboToolBox, ONA, Survey Solutions, CSpro Android, Sphinx

**Office Work** L<sup>A</sup>T<sub>E</sub>X, Office (Word, Excel, Access).

**Environnement** Windows, Linux .

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## Language Skills

French	●●●●●	<i>Excellent</i>
English	●●●●●	<i>Excellent</i>
Arabic	●●●○○	<i>Fluent</i>
Spanish	●○○○○	<i>Basic level</i>
Wolof	●●●●●	<i>Mother Tongue</i>

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## References

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Dr Mbène Dièye Faye **former Coordonnator of PAPA Project (Agricultural Policy Support Project (PAPA/MAER)**, *Manager of the Soil Fertily Project in Senegal (IFDC)*.

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