# Poverty and inequalities in the peanut basin of Senegal: implications and recommendations

## PITCH

In 2016, nearly 90% of households in the Senegalese peanut basin lived below the national poverty line. However, when looking at the situation through the prism of inequalities, the importance of the latter is striking, as reflected by a Gini coefficient of 0.44. While inequalities between average households in different departments are relatively moderate across the whole peanut basin, the incomes of the richest 20% are 10 times those of the poorest 20%. Better access to land and to factors of production (farm equipment and inputs) explains these inequalities, as does rainfall deficit for a given year. Food and economic insecurity is severe among the poorest, and the potential responses of different types of households to economic policy measures designed to promote development vary greatly

## ISSUES

In Senegal, the fight against poverty and inequalities has been a major concern for the various governments, which has been reaffirmed in Phase II of the Plan for Emerging Senegal 2019-2023 (P.61). At the same time, researchers have scarcely studied the issue of inequalities in rural areas in West Africa, because the situation is often seen as uniform, with the prevalence of great poverty. This study therefore aims to examine inequalities in the Senegalese peanut basin, one of the major regions for agricultural production in the country, and to understand their determinants.

## METHODS

We use data from a survey conducted by the Agricultural Policy Support Project (PAPA) among grain and pulse farmers. The sample of farmers in the peanut basin consists of 1,770 households. The calculation of the Gini coefficient, the analysis of its decomposition by source of income, and the characterization of the sources of income make it possible to give a clear picture of inequalities, which we try to explain by the different factors of production, the sources of income, and the geographic conditions.

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**Geography** Senegal

**Key words** inequalities, income, agriculture

**Themes** Economy, agriculture

## RESULTS

**Rainfall differences, but a homogeneous spatial distribution of poverty**

The heterogeneity of average income between departments is relatively moderate (three times higher in Nioro than in Diourbel) compared to intra-departmental inequalities (see Figure 1). On the other hand, the presence of great generalized poverty is of concern: only 4 departments display an average income per capita above the poverty line (Kaolack, Louga, Mbour, and Nioro). Biophysical (more rainfall on average in the south) or socioeconomic conditions do not seem to determine poverty and inequalities. However, rainfall quality in a given year plays a considerable role. Indeed, farms with better-than-average rainfall in 2016 have a higher median income and greater income inequalities than farms with a dry 2016 (+42% median income). These results show that increased rainfall variability – which is precisely what climatologists predict for the future – could increase inequalities.

Access to land and the capacity to invest are the main determinants of farm income inequalities between households

The poorest 40% of households have extremely low monetary income, amounting to 1 euro cent (7 FCFA) and 2 euro cents (11 CFA) per capita and per day, respectively for the poorest 20% and the next 20%. By contrast, the richest 40% are better endowed with factors of production, earning a higher income even if they remain on average well below the national poverty line. Thus, the income of the two richest groups is 3 and 6 euro cents per capita and per day (21 and 42 CFA). These income differences are strongly correlated with access to land: the richest 20% of farms cover an area three times as large as that of the poorest 20%.

Cropping practices also play an important role. Households with higher income (the richest 40%) have more farm equipment, apply more fertilizers, and thus obtain better yields for their main crops. In addition, because of their higher investment and risk-taking capacities, better-off households are more oriented towards cash crops and diversification, which are more profitable.

Non-farm income and transfers exacerbate inequalities today, but could allow a massive exit from poverty.

At the household level, inequalities are exacerbated by income from transfers, non-farming activities, and livestock: the total income of the richest 20% is ten times that of the poorest 20%, while their farm income is only eight times higher. In addition, income from non-farming activities strengthens the investment and risk-taking capacities of the wealthiest households and allows them to diversify their crops, which is more profitable. Indeed, the presence of a secure source of income makes it possible to undertake more profitable farming activities, even if they are more risky. All over the world, the diversification of income sources through non-farming activities makes up for land scarcity and reduces the risks faced by rural households. In the peanut basin, if only one household member had a job paying CFAF 450,000/year, the average income of the poorest 20% of households would triple and that of the next 20% would double.

## RECOMMENDATIONS

▸ Promote access to land and to the means of production by targeting the poorest farmers in particular in order to increase farm income

▸ Set up and/or boost direct transfers (family grants) and service activities related to farming (farm equipment rental services, processing of farm products, input suppliers, etc.) in order to increase non-farm employment opportunities and promote the access to factors of production

▸ Develop safety nets (insurance) and risk-anticipation strategies (weather and seasonal forecasts) for years of poor rainfall to mitigate their effect on household income.