

Impact of pro-gender public policies in the agricultural sectors on women's employment in a context of economic dependence on natural resources: A case study of the DRC.



Photo: USAID

Authors Robert Luanda Baroki | Christian Lukineyo Joshi
Hélène Maisonnave | Mariam Anastasie Bulumba

Date June 2021

Working Paper 2021-14

PEP Working Paper Series

ISSN 2709-7331

Impact of pro-gender public policies in the agricultural sectors on women's employment in a context of economic dependence on natural resources: A case study of the DRC

Abstract

The DRC is characterized by a heavy dependence on the mining sector as well as by glaring gender inequalities in the labor market. Aware of these structural weaknesses, the Congolese government wishes to diversify its economy while reducing gender inequalities. We evaluate the effects of two pro-gender policies on employment and diversification of the Congolese economy using a computable general equilibrium model.

The results reveal that a policy of increasing land allocation for women and government cash transfers to rural female households contributes to the reduction of inequalities in the labor market. However, only the policy of increasing women's land allocation improves economic diversification.

JEL Codes : C68 ; E16; E24; F16; J43; J48.

Keywords: Pro-gender policies, Agricultural sectors, Women's employment, Inequality, Mineral dependence, Economic diversification, CGE, DRC.

Authors

Robert Luanda BAROKI

Lecturer and researcher
Catholic University La Sapiientia of Goma
Goma, Democratic Republic of Congo
baroki.robert@gmail.com

Christian Lukineyo JOSHI

PhD student in economics
Gaston Berger University
Saint-Louis, Senegal
joshichristian48@gmail.com

Hélène Maisonnave

Professor of Economics
University of Le Havre
Normandy, France
hmaisonnave@hotmail.fr

Anastasié Bulumba MARIAM

Researcher,
Goma, Democratic Republic of Congo
mariambulumba@gmail.com

Acknowledgements

This study received technical and financial assistance from the Partnership for Economic Policy (PEP) (www.pep-net.org), funded the Government of Canada through the International Development Research Centre (IDRC). The authors are grateful for Marzia Fontana's valuable comments and suggestions.

Table of Contents

I. Introduction	1
II. Literature review	6
III. Methodology	8
3.1. Data	8
3.2. Model	10
IV. Scenarios and Results	11
4.1. Scenarios Description	11
4.2. Results	12
V. Conclusion and policy implications	19
References	21

List of tables

Table 1 : Main sources of household income according to gender and place of residence (%)	9
Table 2 : Share of the different sources of income within the total income of each household type	10
Table 3 : Impact of gender policies on production (in %)	13
Table 4 : Impact of pro-gender policies on labour demand by gender (%)	14
Table 5 : Impact of pro-gender policies on household incomes (%)	15
Table 6 : Impact of pro-gender policies on real household consumption (% change)	16
Table 7 : Impacts of pro-gender policies on the main sources of government revenue (%)	17
Table 8 : Impact of pro-gender policies on agricultural exports (in %)	18
Table 9 : Impact of pro-gender policies on agricultural imports (in %)	18
Table 10 Impact of pro-gender policies on the contribution of the agricultural sector to total VA and total exports (% change from baseline)	19

I. Introduction

Gender inequality is increasingly costly. In its 2015 report, the McKinsey Global Institute (MGI) points out that advancing women's equality around the world has the potential of adding \$12 trillion to global growth. The MGI (2015) mapped 15 gender equality indicators for 95 countries and found that 40 of them had high or extremely high levels of gender inequality on at least 50% of the indicators. The indicators are divided into four categories: equality in the workplace, essential services and enablers of economic opportunity, legal protection and political voice, and physical security and autonomy.

The MGI (2015) points out that narrowing the gender divide in the world of work would not only be fair, but could also effectively double women's contribution to global GDP growth between 2014 and 2025. It also shows that in order to achieve this impact, gender equality in society will need to be addressed. Similarly, in its Africa Human Development Report, the UNDP (2016) estimates that US\$105 billion in economic losses were attributable to gender inequalities in Africa in 2014. According to the same report, the estimated annual cost of gender inequality in sub-Saharan Africa over the period 2010 to 2014 is \$95 billion.

Other studies show that the low participation of women in the labour market has a negative effect on economic growth and per capita income (Klasen and Lemanna, 2009; Bandara, 2015; Teignier and Cuberes, 2014). Ferrant and Kolev (2016) also point out that gender discrimination in social institutions, impacts long-term growth as it restricts the accessibility of education and the labour market to women, thus reducing total factor productivity. The financial cost of gender discrimination in social institutions is estimated to be up to US\$12 billion in lost income, or 16% of worldwide income. In fact, inequality deprives the economy of a significant part of its labour force or productivity either by excluding it from the market altogether or by limiting its access to resources that could improve its productivity (World Bank, 2001; Klasen and Lemanna, 2009). In addition, women play a central role in the human capital accumulation process at the household level, especially when they are economically independent.

Bradshaw et al (2013) show that the effect of income on household socio-economic aspects is 20 times higher if it is in the hands of a woman rather than in the hands of a man. The fact that gender inequalities do not allow women to fulfil this responsibility is believed to have a negative impact on sustainable development (UNDP, 2016; Ferrant, 2011; Boone, 1996; Ferrant, 2011). For all these reasons, the United Nations General Assembly has made gender equality and the

empowerment of women and girls, one of the Sustainable Development Goals (UN 2015). Achieving this target is considered to have the potential to accelerate the implementation of the UN 2030 agenda given its interconnection with the other goals (UNDP, 2018). Some progress is cited on some aspects of gender inequality around the world, but a considerable gap remains regarding women's access to employment opportunities (Seguino, 2016; Klasen, 2017).

Despite the signing of various international agreements on gender equality by the Congolese government (Ministry of Gender, Family and Children, 2018), the DRC is among the ten most unequal countries in the world in terms of gender equality (Human Development Report, 2012, as cited in Seguino and Were, 2014), although a slight improvement in terms of gender discrimination in social institutions was reported by the OECD's Social Institutions and Gender Index (SIGI)¹, which stood at 0.467 in 2014 and 0.394 in 2019. Furthermore, according to the UN Economic Commission for Africa's Gender Inequality Index, the DRC is listed as one of the countries in Africa marked by high levels of gender inequality (ECA, 2017, p.10).

These inequalities are also visible in the Congolese labour market, where women are still under-represented, with an activity rate of 63.7% compared to 71.5% for men and an employment rate of 58.9% compared to 63.4% for men (NSI, 2014 and WDI, World Bank). Most women are employed in the agricultural sector (78%), followed by the service sector (17.3%) and to a lesser extent in industry (3.7%). In contrast, 22.3% of men are employed in industry, 14.6% in services and 62% in the agricultural sector (ILO Statistics, 2014).

Recent data on youth unemployment, the largest segment of the Congolese labour force, show that young women experience a higher rate of unemployment (20%) than their male counterparts (12%) (Dabire, 2018). The data also shows that women are more affected by unemployment than men, with a rate of 19.6% compared to 15.2% for men (NSI, 2014). In terms of income, women are paid much less, with an average monthly salary equivalent to half that of their male counterparts, irrespective of where they live (NSI, 2014). In Kinshasa, the average monthly wage is 140,937 FC (Congolese francs) for men, compared to 75,506 FC (Congolese francs) for women, and 95,206 FC (Congolese francs) for men in other urban centres compared to 45,702 FC (Congolese francs) for women.

¹ <https://www.genderindex.org/wp-content/uploads/files/datasheets/2019/CD.pdf>

In rural areas, the average monthly wage is 39,371 FC (Congolese francs) for men and 20,000 FC (Congolese francs) for women (NSI, 2014). In addition, the female wage bill is lower than that of their male counterparts in both the agricultural and non-agricultural sectors. Men's share of the total wage bill is 86%, compared to 14% for women (SAM, 2013). These wage differences are most evident if we take into account the relative absence of women in the highest paid sectors, particularly in the industrial sector where the proportion of working women is indicative of the prevailing gender inequalities according to Seguino (2016). Gender inequalities in employment lead to poverty among women and children (World Bank, 2018).

The poverty rate in the DRC is thus more pronounced in rural areas, where most of the female labour force is concentrated and mainly employed in the agricultural sector. The overall poverty rate of households is 56.1% in rural areas, compared to 50.8% in urban ones, with a rate of 49.1% for rural female households compared to 48.5% for urban female households and with a rate of 57.1% for rural male households compared to 51.5% for urban male households. The World Bank² and the NSI point out that the poverty rate (based on the \$1.9 a day threshold) was around 63.4% of the population in 2012 and it increased to 72.6% in 2019. In terms of inequality, the Gini index, which was around 0.39 in 2000 and 0.42 in 2012, deteriorated further in 2019 to 0.421.

In addition to these gender inequalities, is the fragility of the Congolese economy, which is highly dependent on the mining sector. Indeed, this sector contributes to around 20% of GDP and 36% of the economic growth achieved between 2010 and 2015, as well as contributing to more than 90% of total exports (Central Bank of Congo, 2017; ECA, 2017, 2018). It is also the sector that provides the largest portion of wages (29.4% of total wages) representing 62.6% of men's total wages and 52.5% of women's wages. The decline in world prices always has negative repercussions on the national economy, thus contributing to the further worsening of gender inequalities in the labour market.

Faced with gender inequalities in the labour market and the dependence of its economy on fluctuations in the prices of natural resources, the Congolese state has become aware of the need to implement a policy of economic diversification with a view to increasing the economic importance of other sectors of activity, while also promoting employment across the board, in particular for women. In the Congo Growth and Poverty Reduction Strategy Paper (I and II) and the

²<https://www.banquemondiale.org/fr/country/drc/overview> and <http://pubdocs.worldbank.org/en/184961554848358330/mpo-cod.pdf>

National Strategic Development Plan, the government has set priority objectives for job creation, poverty reduction and economic diversification in the agricultural sector, which, according to the UNDP (2015, p.5), has a high growth potential.

Furthermore, the UNDP (2016) stresses that the gender issue should not be treated as a separate issue but should be included within the various government plans and programmes in order to ensure that the targeted economic development benefits both men and women in an equitable and sustainable way. This is all the more important since gender inequalities in terms of access to employment have a negative impact on economic growth, especially in developing countries (Seguino, 2017; Seguino and Were, 2014; Klasen, 2002) and that economic development based on the mining sector alone, will not have any positive impact on reducing gender inequalities (Klasen, 2017). Hence the need for policies focused on promoting livelihood and employment strategies for women (Seguino and Grown, 2006; UNDP, 2016; Seguino, 2016).

Among the suggested public policies to address gender inequalities and promote female employment are access to social infrastructures as well as the promotion of pro-gender public policies supporting female labour-intensive sectors (Klasen, 2019). Policies to provide women with productive assets are also recommended. Johnson et al (2016), Mishra and Sam (2016), Anderson and Eswaran (2005) and Rosetti and Kakande (2010) highlight the positive impact of a policy of allocating more land to women in a developing country context, on female production and employment. The study carried out by Rosetti and Kakande (2010) in Uganda, found that the impact of increasing female land ownership would have a significant impact on the overall rate of economic growth, and more particularly on the employability of women in the agricultural sector (ILO Statistics, 2014).

In the DRC, a key barrier to agricultural production, smallholder marketing and overall agricultural growth is access to inputs and funding (World Bank, 2018). These constraints are even more acute for women, who are victims of socio-cultural obstacles that prevent them from acquiring assets. Dorward et al (2004) show that policies to strengthen the ability of rural farmers, the majority of whom are women, to acquire inputs and access funding can improve their productivity and enhance their chances of participating in commercial agriculture. Thus, a policy of cash transfers would help reduce the economic vulnerability of rural female farmers. It would also encourage work and ensure economic security (Standing, 2007) and economic growth (Barrientos, 2008).

In the case of the DRC, the World Bank (2018) and the Ministry of Gender, Family and Children

(2015) stress that the discrimination faced by women, mainly with regard to the accumulation of productive assets, is one of the main sources of gender inequalities in the labour market. Indeed, the limited access of women to both land and financial capital, prevents them from investing in the assets that would improve their productivity and consequently their income in the labour market (World Bank, 2018; UNDP, 2016). Yet the access of women to land is positively correlated to agricultural production (UNDP, 2016).

The objective of this study is to show how pro-gender public policies in the agricultural sectors could contribute to the reduction of gender inequalities in the labour market and to the diversification of the Congolese economy, which are the main priorities of the DRC government as set out in the National Strategic Development Plan (PNSD). Thus, on the one hand, we will assess the effects of increasing the amount of land allocated to women, and on the other hand, the effects of cash transfers to rural female households.

In order to assess the impact of these two pro-gender public policies on the Congolese economy, we use a computable general equilibrium model. This type of tool is particularly suitable as it allows for the effects of feedback from the different sectors within the economy and the gender dimension to be taken into account (Were and Kiringai, 2003; Cockburn et al, 2007). In addition to the impacts of these two policies on employment and income redistribution, we are interested in whether a pro-gender policy can also contribute to the diversification of the economy, which is another major economic objective of the DRC. Indeed, by targeting pro-gender public policies in the agricultural sectors, the DRC would be able to make progress towards achieving the MDG number 5 on gender equality and the empowerment of women and girls, but also in building a more robust economy that is less dependent on natural resources.

The rest of the paper is organised as follows. The second section deals with the literature review. The third and fourth sections present the methodology and results of this study. The last section focuses on the conclusion and policy implications of this study.

II. Literature review

The study of the impacts of pro-gender public policies on women's employment is covered by a variety of papers. The work on this subject has often been confined to female-intensive sectors. Thus, we will focus on studies that address the impact of pro-gender public policies in the agricultural sectors on women's employment. It should be noted, however, that in the empirical literature, these studies focus more specifically on the impact of an increase in assets and/or production factors held by women, and particularly the land factor.

Using estimates applied to rural Bangladeshi data, Anderson and Eswaran (2005) find that labour income from female-owned land has a greater effect on the empowerment of women than rental income from female-owned land. Furthermore, the study reveals that the employability of the woman outside her husband's farm contributes significantly to her autonomy. Johnson et al (2016) point out that the ownership of assets is important in the reduction of poverty, and women's ownership of assets is linked to positive development outcomes at both the household and individual levels. Mishra and Sam (2016) highlight that female land ownership in Nepal enhances their empowerment. This is reflected in the creation of employment opportunities for women and the redirection of their resources towards marginal opportunities, including increased investment in human (household) capital. Rosetti and Kakande (2010) simulate a 5% annual increase in women's land ownership in Uganda and find a positive impact on agricultural output growth (approximately by 0.3% per year), on the overall rate of economic growth, and particularly on the employability of women in the agricultural sector.

Meinzen-Dick et al (2019) point out that rural households are dependent on a wide range of natural resource assets as a means of subsistence and that land is the most valuable asset in most rural household portfolios. The authors draw on an extensive body of literature that makes the link between women's land rights and poverty reduction as well as improved welfare and incomes of female households in rural areas (Quisumbing and Kumar, 2014; Deininger, Ali and Yamano, 2008; Dillon and Voena, 2017). The authors also review the vast body of literature that exists regarding the relationship between land security, livelihoods and poverty (Prosterman, Mitchell and Hansted, 2009). They show that there is a correlation between the ownership and control of assets by women and the improvement of socio-economic indicators for themselves and their families (Quisumbing and Maluccio 2003, Doss 2006). In addition to the studies assessing the impact of increasing the

production factors held by women, other studies focus on the impact of cash transfer policies on improving women's employment opportunities.

Using a CGE model combined with a microsimulation model, Kyophilavong (2011) analyses the impact of cash transfers to poor households with children, located in rural and urban areas of Laos, on poverty and income distribution in the face of external shocks, such as the global financial crisis. He finds that cash transfers have a significant impact on poverty and income distribution and that these transfers lead to a greater reduction in poverty in rural areas than in urban ones. Cury (2016) also uses a CGE model combined with a microsimulation model to assess the effectiveness of Brazil's two largest cash transfer programmes (*Bolsa Família* (PBF) and *Benefício de Prestação Continuada* (BPC)) in achieving the goal of reducing poverty and income inequality.

The results reveal a positive impact on the reduction of inequality from 2003 to 2005, although the impact on the reduction of poverty was not as strong or as significant. Novella et al (2012) examine how the bargaining power structure of households affects the parental labour supply response to conditional cash transfer programmes. Using randomised experimental designs from rural Honduras (PRAF), Mexico (PROGRESA) and Nicaragua (RPS), they find that cash transfer programmes slightly alter paternal and maternal labour supply and that this effect depends on the distribution of power in the household. Hagen-Zanker et al (2017) summarise the findings of several studies on the impacts of cash transfers on women and girls across six areas. Among the evidence found, they point out that cash transfers have a positive impact on the well-being and opportunities of women and girls, particularly in education and employment; and that there is empirical evidence to support the fact that female-headed households make greater productive investments than male-headed households.

Levy and Robinson (2014) on Cambodia find strong complementarities between social protection (transfers, etc.) and rural development policies. Levy and Robinson (2014) point out that at a given level of public expenditure, a combination of these two types of policies is likely to generate more poverty reduction than cash transfers alone, while also significantly benefiting the local economy. These authors also emphasise that social protection programmes can become more efficient when they are implemented simultaneously with productivity-enhancing policies.

Contrary to these studies, this present study has a gender focus and concentrates on those rural households most engaged in agriculture and most vulnerable in terms of poverty and income

inequality. It also provides information about how pro-gender policies can lead to economic diversification.

III. Methodology

For this study, we used computable general equilibrium modelling. The database used for this purpose is the Social Accounting Matrix (SAM) which provides a snapshot of the economy.

3.1. Data

The SAM used in this study was developed by the NSI and UNDP (2017). It includes 41 sector accounts and 41 product accounts. Apart from the labour and land factors, which are of most interest to us in our study and which we have disaggregated, the other production factor is capital. The economic agents are households, businesses, government and the rest of the world. There are seven categories of taxes in this SAM, including non-deductible VAT, taxes on exports, taxes and duties on imports, taxes on production net of subsidies, taxes on household income, taxes on business income and other taxes on products. The capital accumulation account includes investment and stock variations.

We adapted this standard SAM to the specificities of our study by disaggregating some accounts, using the underlying 1-2-3 survey. To take the gender dimension into account, we disaggregated the labour factor according to gender (male labour and female labour) based on the gender of the household head. We disaggregated³ the capital account by gender (male capital and

³For the disaggregation of the capital account into capital factor and land factor by gender, we used the 1-2-3 employment, informal sector and household consumption survey. It is a reliable data source because it was carried out by the National Institute of Statistics of the DRC. It contains both data on assets held by individuals and households. We used the data on assets held by households (taking into account the gender of the household head) to disaggregate the capital factor into land and capital factors according to the gender of the household head (male and female capital) in the form of machinery and equipment, and male and female land in the form of agricultural land farmed. In order to achieve this, we used the variable of agricultural land exploited by the household as well as that of machinery and equipment. We thus calculated the proportions of male and female households by referring to the gender variable of the household head.

female capital). However, for the subsistence agricultural sector, we have disaggregated the capital account into capital factor (male capital and female capital) and land factor (male land and female land). We used data from the 1-2-3 survey on agricultural households. We also disaggregated the household account by gender and place of residence into six categories (rural female and male households, urban female and male households in Kinshasa, and female and male households in other urban centres, i.e. other cities in the DRC).

We note that there are inequalities in terms of factor remuneration and transfers received by households according to gender (Table 1). The share of income received by male households is higher for all sources of income, and notably as regards the remuneration of the land factor. The share of female household income remains lower than that of male households, regardless of the place of residence. The last column provides information on the share of total income per household type. Therefore, in terms of total income, there are significant differences in income between male and female households, with somewhat higher income disparities occurring between rural male and female households.

Table1 : Main sources of household income according to gender and place of residence (%)

	Factor remuneration		Transfers received			Total income
	Labour	Capital	Land	Other Agents	Gvt	
	Male households in Kinshasa	13	42	0	2	
Female households in Kinshasa	3	9	3	1	11	5
Male households in other urban centres	27	30	0	37	37	27
Female households in other urban centres	4	4	0	1	1	3
Rural male households	45	16	80	58	5	38
Rural female households	8	0	17	1	0	5
Total	100	100	100	100	100	100

Source: Authors, based on the SAM.

The main source of income for households in Kinshasa (both male and female) is return on capital (Table 2). However, the main source of income for households in other urban centres and for rural households (especially female) is from labour. It should also be noted that households in Kinshasa benefit more from government transfers than other households. Nevertheless, male households in rural areas and in other urban centres benefit the most from transfers received from other economic agents.

**Table 2 : Share of the different sources of income within the total income of each household type
(in %)**

	Factor				Total	
	renumeration		Transfers received		income	
	Labour	Capital	Other Agents	Gvt		
Male households in Kinshasa	29	55	1	15	100	22
Female households in Kinshasa	28	54	2	17	100	5
Male households in other urban centres	48	31	10	10	100	27
Female households in other urban centres	60	34	3	3	100	3
Rural male households	56	31	11	1	100	38
Rural female households	67	30	2	1	100	5

Source: Authors, based on the SAM.

3.2. Model

To assess the impact of the two pro-gender policies on the Congolese economy, we use a CGE model based on the PEP 1-1 model by Decaluwé et al. (2013).

The model is fully described in Decaluwé et al (2013). We describe the modifications made to accommodate the structure of the Congolese economy and the gender aspect of our study. In our model, the composite factors of production are labour (disaggregated according to gender into male and female labour) and capital (subdivided first into capital and land and then by gender). The disaggregation of the capital factor makes it possible to simulate the impact of the policy of increasing the amount of land owned by women. Each type of labour is mobile across sectors, while capital remains fixed.

The model includes 41 sectors and 41 products. Production is a Leontief type function between total value added and intermediate consumption. Intermediate consumption is also a Leontief function between intermediate demands. As regards total value added, it is disaggregated according to gender, into male value added and female value added, both of which are linked through a CES. For the elasticity values, we referred to the World Bank study (2017). However, for the elasticity values relating to the gender disaggregation of the labour market, we referred to the study carried out by Fontana (2001) on Zambia, which is a country with similar economic characteristics to the DRC.

IV. Scenarios and Results

A description of the different scenarios is presented in the first sub-section. The macroeconomic effects of pro-gender policies are then described in the following sub-sections, including: the impacts on sectoral production (sub-section 2), on women's employment (sub-section 3), on household income and consumption (sub-section 4), on government revenue (sub-section 5), and on investment and foreign trade (sub-section 6).

4.1. Scenarios Description

Two pro-gender policies in the agricultural sectors are addressed in this study: a policy of increasing women's access to land and a policy of government cash transfers to rural female households.

To choose the magnitude of the shock for the simulation of the first policy (SIM1), we considered the enormous agricultural potential of the DRC. In fact, the DRC has the second largest amount of arable land in the world after Brazil, amounting to 80 million hectares, of which only less than 10% is exploited (Growth and Poverty Reduction Strategy Paper2, 2011). However, women make up only 8.9% of landowners (FAO statistics) and own only 25% of the total cultivated land in the DRC⁴. Given the low ownership of land by women and the large availability of cultivable arable land, we simulate a 40% increase in the amount of land allocated to women. The implementation of this policy does not involve expropriation costs as the land is available and not currently in use.

Regarding the government's cash transfer policy for rural female households (SIM 2), the World Bank (2018) reports that one of the obstacles hindering agricultural production, smallholder marketing and overall agricultural growth in the DRC is poor access to both inputs and funding. These constraints are even more acute for women, as socio-cultural norms prevent them from acquiring assets (World Bank, 2018). Given the very low percentage of government transfers to rural

⁴<https://land-links.org/country-profile/democratic-republic-congo/>

female households and the existence of a programme designed to promote support to rural households, we decide to simulate a 100% increase in transfers to rural female-headed households.

4.2. Results

4.2.1. Impact on production

The first policy (Sim 1) leads to a 4.26% increase of production in the subsistence agricultural sector. Indeed, the increase in the land factor leads to an increase in value added, which favours the increase in production in the subsistence agricultural sector as well as in the sectors that depend on it (in particular the grain processing sector and the manufacture of cereal-based products sector). In fact, given the availability of land, if the sector is to produce more, it requires intermediate consumption from the sectors mentioned above. We consequently have spill-over effects from the agricultural sector to the other sectors. So we have spill-over effects from the agricultural sector to the other sectors. Overall, this policy causes an increase in real GDP at basic prices by 0.33%. It is worth noting that the increase in the female ownership of land leads to a decrease in the remuneration of this production factor in the subsistence agricultural sector, especially for women.

The impact of the second policy is transmitted through the economy via the income of rural female households. Effectively, this policy increases the income of rural female households. This encourages them to increase their level of consumption and their level of savings. This increase in consumption contributes to the increase in total demand and thus to an increase in production. However, given the very small fraction of government transfers to rural female households, this policy does not have significant effects on sectoral output nor on real GDP at basic prices, as can be seen in the table below.

Table 3 : Impact of gender policies on production (in %)

Main sectors	Production_SIM1	Production_SIM2
Subsistence agriculture	4.26	0.01
Industrial agriculture	-0.34	0.01
Livestock and hunting	-0.15	0.03
Forestry and logging	-0.91	0.06
Fishing and fish farming	-0.71	0.06
Mining	-0.46	-0.01
Grain processing	2.65	0.02
Manufacture of cereal-based food products	0.45	0.03
Other food industries	3.14	0.002
Trade	0.39	0.01
Health and social work	0.05	0.01
Real GDP at basic prices	0.33	0.000

With SIM1: Simulating the increase in female-owned land,
SIM2: Simulating government cash transfers to rural female households.
Source: Authors, based on simulations

4.2.2. Impact on female labour demand and wages

Increasing female land ownership leads to an increase in the demand for female labour, followed by an increase in their wages, mainly in the subsistence agricultural sector and those sectors that depend on it. This increase in production factors leads to an increase in value added and production.

The second policy leads to a slight increase in the labour demand of both men and women in almost all sectors. However, this slight increase is due to the limited impact of this policy on production (see above).

Table 4 : Impact of pro-gender policies on labour demand by gender (%)

	LDC_SIM	LDF_SIM	LDM_SIM	LDC_SIM	LDF_SIM	LDM_SIM
Main sectors	1	1	1	2	2	2
Subsistence agriculture	1.11	15.48	-1.19	0.04	0.03	0.04
Industrial agriculture	-0.29	-1.08	-0.14	0.01	0.01	0.01
Livestock and hunting	-0.1	-0.9	0.05	0.03	0.02	0.03
Forestry and logging	-0.86	-1.65	-0.71	0.06	0.06	0.06
Fishing and fish farming	-0.66	-1.47	-0.52	0.06	0.05	0.06
Mining	-0.45	-1.68	-0.22	-0.01	-0.02	-0.01
Grain processing	2.67	1.4	2.91	0.03	0.02	0.03
Manufacture of cereal-based food products	0.47	-0.78	0.70	0.03	0.03	0.04
Other food industries	3.16	1.88	3.4	0.003	-0.001	0.004
Trade	0.18	-1.2	0.76	0.01	0.01	0.01
Health and social work	0.11	-1.65	0.26	0.01	0.01	0.01

With LDC: Composite labour demand, LDF: Female labour demand, LDM Male labour demand SIM1: Simulation of the increase in female-owned land, SIM2: Simulation of government cash transfers to rural female households. Source: Authors, based on simulations

About wages, the first policy (Sim1) improves the composite wage rate by about 0.35%, with a greater increase in women's wages (2.88% on average) in both the agricultural and non-agricultural sectors. The second policy leads to a slight increase in the wages of both women (0.02% on average) and men (0.01% on average).

4.2.3. Impact on household income and consumption according to place of residence

4.2.3.1 Impact on household income

The first policy generally has a somewhat negative impact on the incomes of female households, and on rural ones. This is due to the dominant effects of the decline in their capital income (over 40%) resulting from the increase in the land ownership of women and therefore in their demand for land. It should also be noted that transfers received by rural female households from other agents decline. In contrast, the second policy has a positive impact on the total income of rural female households (about 0.72%), which also contributes to the increase in the income of other household types, regardless of the place of residence.

Table 5 : Impact of pro-gender policies on household incomes (%)

	Labour		Capital		Transfer		Total	
	income		income		income		income	
Households	Sim1	Sim2	Sim1	Sim2	Sim1	Sim2	Sim1	Sim2
Male households in Kinshasa	-0.11	0.01	0.18	0.01	-0.002	0.00	0.07	0.01
Female households in Kinshasa	2.88	0.02	-3.34	0.04	-0.1	0.00	-1.01	0.03
Male households in other urban centres	-0.11	0.01	0.18	0.01	-0.09	0.01	-0.02	0.01
Female households in other urban centres	2.88	0.02	0.87	0.03	0.51	0.01	2.05	0.02
Rural male households	-0.11	0.01	-3.66	0.12	-0.42	0.02	-1.27	0.04
Rural female households	2.88	0.02	-45.0	0.19	-8.48	28.99	-11.86	0.72

SIM1: Simulation of the increase in female-owned land,

SIM2: Simulation of government cash transfers to rural female households.

Source: Authors, based on simulations

4.2.3.2 Impact on household consumption

Except for rural female households, the first policy favours an increase in the consumption of food products and flour by all other households, and in necessities by male households in Kinshasa and by both male and female households in other urban centres. However, the second policy does not have a significant impact on household consumption, except for rural households, and especially female households, where consumption has increased. In general, real consumption increases for all households, in response to the policy of increasing female land ownership, except for rural female households. These households, however, become the major beneficiaries of the government transfer policy, which induces the greatest increase in real consumption in these households.

Table 6 : Impact of pro-gender policies on real household consumption (% change)

Households	Real consumption	
	Sim1	Sim2
Male households in Kinshasa	1.97	-0.02
Female households in Kinshasa	0.87	0
Male households in other urban centres	1.89	-0.02
Female households in other urban centres	4	0
Rural male households	0.61	0.01
Rural female households	-10.18	0.69

With SIM1 and SIM2 defined as in Table 5 above.

Source: Authors, based on simulations

The first policy leads to a decline in composite prices in almost all sectors that have experienced an increase in production, especially the subsistence agricultural sector, which is affected by a decline in the value-added price and intermediate consumption. The second policy is characterised more, by a very small increase in composite prices because of the very small increase in total demand.

4.2.4. Impact on government revenues

The two pro-gender policies have different impacts on total government revenue and its components. Even though the impact is not significant enough, the first policy decreases total government revenue by about 0.42%, given that capital taxes constitute the largest share of government revenue (20%) and that taxes on household capital also make a significant contribution. On the other hand, the second policy helps to marginally increase total government revenue (Table 6). Nevertheless, it can be pointed out, that on the one hand, this policy increases the public deficit, with a decline in public savings by approximately 0.3%, because financing this policy involves the release of funds by the government. On the other hand, this policy does not lead to a significant increase in government transfers to economic agents despite a significant increase (of about 100%) in government transfers to rural female households.

Table 3 : Impacts of pro-gender policies on the main sources of government revenue (%)

Source of government revenue and government expenditure	Impact of pro-gender policies	
	Sim1	Sim2
Indirect taxes on products	-0.40	0.01
Taxes on production	-0.23	-0.01
Taxes on corporate income	0.36	0.01
Taxes on imports	-0.39	-0.01
Taxes on household income	-1.16	0.07
Taxes on exports	-0.25	0.00
Transfers received	-0.98	0.02
Total government revenue	-0.42	0.01
Savings	-0.91	-0.29
Government transfers	-1.69	0.1

SIM1: Simulating the increase in female-owned land, SIM2: Simulating government cash transfers to rural female households.

Source: Authors, based on simulations

Both policies, however, fail to improve the incomes of the economic agents, particularly households and the government significantly enough. They also fail to stimulate their respective savings, to increase total savings (and thus investment) and to improve the demand for goods for investment purposes.

4.2.5. Impact on foreign trade

As can be seen from the table below, the first policy favours increased exports in the subsistence agricultural sector and in other sectors that are highly dependent on it, notably the grain processing sector, the cereal-based food manufacturing sector, and the other food industries sector. As a result of the price effects, the export of agricultural products (foodstuffs) shows remarkable growth. However, the second policy does not contribute to the increase in exports. One of the reasons for this is that the level of production has remained constant due to the insignificant impact of this policy on sectoral production.

Table 4 : Impact of pro-gender policies on agricultural exports (in %)

Sectors	EXP_SIM1	EXP_SIM2
Subsistence agriculture	15.24	-0.12
Industrial and export agriculture	-0.47	0.00
Forestry Logging	-0.79	0.02
Mining	-0.46	-0.01
Grain processing	6.34	-0.04
Manufacture of cereal-based food products	1.34	0.00
Other food industries	5.21	-0.04

With SIM1: Simulating the increase in female-owned land, SIM2: Simulating government cash transfers to rural female households.

Source: Authors, based on simulations

As can be seen in the table below, the first policy leads to a decrease in imports, especially in the subsistence agricultural sector and dependent sectors, because of increased production. However, without a sufficient increase in production, the second policy does not lead to a reduction in imports.

Table 5 : Impact of pro-gender policies on agricultural imports (in %)

Sectors	IMP_SIM1	IMP_SIM2
Subsistence agriculture	-5.20	0.11
Industrial and export agriculture	0.03	0.03
Forestry Logging	-0.67	0.07
Mining	-0.18	-0.02
Grain processing	-0.35	0.05
Manufacture of cereal-based food products	-0.55	0.05
Other food industries	-0.65	0.05

With SIM1: Simulating the increase in female-owned land, SIM2: Simulating government cash transfers to rural female households.

Source: Authors, based on simulations

In terms of economic diversification, the results reveal a slight increase (of about 2% compared to the situation without the shock) of the share of agricultural production within total production, following the policy of increasing women's access to land. However, this percentage remains constant after simulating the policy of increasing government transfers to rural women. Both policies have no effect on export diversification.

Table 10 Impact of pro-gender policies on the contribution of the agricultural sector to total VA and total exports (% change from baseline)

Diversification indicators	Sim1	Sim2
Share of agricultural VA in total VA	1.83	0
Share of agricultural exports in total exports	0	0

With SIM1: Simulating the increase in female-owned land, SIM2: Simulating government cash transfers to rural female households.

Source: Authors, based on simulations

V. Conclusion and policy implications

The objective of this study was to show how pro-gender public policies in the agricultural sectors can contribute to the reduction of gender inequalities in the labour market and to the diversification of the Congolese economy.

The results reveal that a policy of increasing female land ownership by about 40% would increase the demand for female labour in subsistence agriculture and related sectors, and subsequently increase their remuneration. From a macroeconomic perspective, this policy has a positive impact on GDP (0.33%). As for the policy of doubling government cash transfers to rural female households, it brings about a small improvement in the labour demand of both women and men in almost all sectors. However, the impact of this policy is more apparent for rural women who experience an increase in their real consumption. Both policy options would contribute to the enhancement of female employment and are therefore recommendable as policies to address the issue of gender inequality in the Congolese labour market. Nevertheless, only the policy of increasing female land ownership can contribute to both the reduction of gender inequalities and to economic diversification, through increased production and exports in the agricultural sectors, especially in the subsistence agricultural sector.

Given the upcoming review of the PNSD in 2021, we propose the following timeline for the implementation of the recommendations that emerged from this study. In the first part of the PNSD dealing with economic diversification and transformation, the policy of increasing female land

ownership could be added to the agenda of strengthening the contribution of agriculture to economic growth and employment. In the third part of the PNSD dealing with social and human resource development, the policy of increasing female land ownership as well as increasing government transfers to rural female households could be added to the objectives regarding the promotion of youth, female and vulnerable group employment. Both policies are workable in the DRC given that, for the first policy, there is a lot of unused arable land available, and, for the second policy, there is legislation allowing for the use of positive discrimination in favour of the employment of vulnerable groups, with women being legally considered as vulnerable in the DRC.

References

- AFRICAN DEVELOPMENT BANK GROUP, 2015. *Empowering African Women: An Agenda for Action*. Abidjan, May 2015. 40p.
- ANDERSON, Siwan and ESWARAN, Mukesh, 2005. *What Determines Female Autonomy? Evidence from Bangladesh*. Department of Economics. University of British Columbia. 37p.
- BANDARA, Amarakoon, 2015. Economic Cost of Gender Gaps in Effective Labor: Africa's Missing Growth Reserve. *FeministEconomics* 21(2).
- BANQUE CENTRALE DU CONGO (BCC), 2017. *Rapport annuel 2016*. Kinshasa. Novembre 2017. 372p.
- BANQUE CENTRALE DU CONGO (BCC), 2018. *Rapport annuel 2017*. Kinshasa. Décembre 2018. 289p.
- BANQUE MONDIALE, 2001. *Engendering Development: Through Gender Equality in Rights, Resources and Voice*. Policy Research Report. Washington, D.C.: World Bank.
- BANQUE MONDIALE, 2015. *Africa's Pulse*, Volume 11. Avril 2015. 45p.
- BANQUE MONDIALE, 2016. *Commodity Markets Outlook: Weak Growth in Emerging Economies and Commodity Markets*. Janvier 2016. 74p.
- BANQUE MONDIALE, 2017. *République Démocratique du Congo, Utiliser la Rente des Industries Extractives pour Promouvoir la Croissance et le Développement : Intégration des Scénarios de la Revue de la Gestion des Dépenses Publiques et de la Responsabilisation Financière dans un Modèle d'Équilibre Général Calculable*. Washington, DC: World Bank. Rapport No. 115288-ZR.
- BANQUE MONDIALE, 2018. *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*. Washington, DC: World Bank.
- BARRIENTOS, Armando, 2008. *Social transfers and growth: a review*. Working Paper No. 112 Chronic Poverty Research Centre.
- BRADSHAW, Sarah, CASTELLINO, Joshua and DIOP, Bineta, 2013. *Women's role in economic development: Overcoming the constraints*. Sustainable Development Solutions Network. Submitted to the High Level Panel on the Post-2015 Development Agenda.
- COCKBURN, John, FOFANA, Ismael, DECALUWE, Bernard, MABUGU Ramos and CHITIGA Margaret 2007. *A Gender-Focused Macro-Micro Analysis of the Poverty Impacts of Trade Liberalization in South Africa*. chapter 11 in Lambert, P J, Bishop, J A and Yoram, A (eds), *Equity*, Elsevier: Oxford, p.269-305
- COMMISSION ECONOMIQUE DES NATIONS-UNIES POUR L'AFRIQUE (CEA), 2018. *African Gender and Development Index Regional Synthesis Report: Measuring Gender Equality and Women's Empowerment in Africa*. Addis-Abeba. Novembre 2017. 142p.
- COMMISSION ECONOMIQUE DES NATIONS-UNIES POUR L'AFRIQUE (CEA), 2018. *République Démocratique du Congo : Profil de pays 2017*. Addis-Abeba. Mars 2018. 66p.
- CONFERENCE DES NATIONS-UNIES SUR LE COMMERCE ET LE DEVELOPPEMENT (CNUCED), 2017. *Commodities and Development Report 2017: Commodity Markets, Economic Growth and Development*. 98p.

- CURY, Samir, 2016. Cash Transfer Policies, Taxation and the Fall in Inequality in Brazil An Integrated Microsimulation-CGE Analysis. *International Journal of Microsimulation* (2016) 9(1) 55-85
- DABIRE, Jean Marrie Vianney. 2018. *Perspectives Economiques en Afrique 2018 : République Démocratique du Congo*, Groupe de la Banque Africaine de Développement,
- DECALUWE, Bernard, LEMELIN, André, ROBICHAUD, Véronique et MAISONNAVE, Hélène, 2013. *PEP-1-1, the PEP standard single-country, static CGE model*. Partnership for Economic Policy. July 2013. 127p.
- DEININGER, Klaus, ALI, Daniel Ayalew, HOLDEN, Stein, ZEVENBERGEN, Jaap, 2008. Rural land certification in Ethiopia: Process, initial impact, and implications for Other African Countries. *World Development*, Volume 36, Issue 10, October 2008, Pages 1786-1812. <https://doi.org/10.1016/j.worlddev.2007.09.012>
- DILLON, Brian and VOENA, Alessandra, 2017. *Inheritance Customs and Agricultural Investment*. Available at SSRN. <https://ssrn.com/abstract=2913102>.
- DORWARD, Andrew, MORRISON, Jamie, WOBST, Peter, LOFGREN, Hans and TCHALE, Hardwick, 2014. *Modelling Pro-poor Agricultural Growth Strategies in Malawi: Lessons for Policy and Analysis*. African Development and Poverty Reduction: the Macro-Micro Linkage, Forum paper 2004. 38p.
- DOSS, Cheryl R., 2006. The effects of intrahousehold property ownership on expenditure patterns in Ghana. *Journal of African Economies*, Vol. 15, No. 1, pp. 149-180, March 2006
- FERRANT, Gaëlle, 2011. *How Gender Inequalities Hinder Development: Cross-Country Evidence*. halshs-00609828
- FERRANT, Gaëlle et KOLEV, Alexandra, 2016, *Does gender discrimination in social institutions matter for long-term growth? : Cross-country evidence*. Documents de travail du Centre de développement de l'OCDE, n° 330, Éditions OCDE, Paris, <https://doi.org/10.1787/5jm2hz8dgl6-en>.
- Fofana, Ismaël 2015. Gender Analysis of the Policy Responses to High Oil Prices: A Case Study of South Africa. *Feminist Economics*, 21:3, 216-240, DOI: 10.1080/13545701.2015.1023330
- FONTANA, Marzia, 2001. *Modelling the effects of trade on women: a closer look at Bangladesh*. IDS Working Paper 139. 43p.
- FONDS MONETAIRE INTERNATIONAL (FMI), 2015a. *Fiscal Monitor: The Commodities Roller Coaster A Fiscal Framework for Uncertain Times*. Octobre 2015. 95p. FONDS MONETAIRE INTERNATIONAL (FMI), 2015b. *Perspectives économiques régionales : Afrique subsaharienne, Faire face à un environnement qui se dégrade*. Octobre 2015. 123p.
- HAGEN-ZANKER, Jessica, PELLERANO, Luca, BASTAGLI, Francesca, HARMAN, Luke, BARCA, Valentina, STURGE, Georgina, SCHMIDT, Tanja and LAING, Calvin, 2017. *The impact of cash transfers on women and girls. A summary of the evidence*. Overseas Development Institute Briefing. March 2017.
- INSTITUT NATIONAL DES STATISTIQUES (INS), 2014. *Enquête 1-2-3 : Résultats de l'Enquête sur l'emploi, le secteur informel et sur la consommation des ménages/2012*. Kinshasa. Septembre 2014. 164p..

- JOHNSON, Nancy L., KOVARIK, Chiara, MEINZEN-DICK, Ruth, NJUKI, Jemimah and QUISUMBING, Agnes, 2016. Gender, Assets, and Agricultural Development: Lessons from Eight Projects. *World Development*, Volume 83, pp.295-311, July 2016
- KYOPHILAVONG, Phouphet, 2011. *Impact of Cash Transfer on Poverty and Income Distribution*, in Oum, S., T. L. Giang, V. Sann and P. Kyophilavong (eds.), *Impacts of Conditional Cash Transfers on Growth, Income Distribution and Poverty in Selected ASEAN countries*. ERIA Research Project Report 2010-13, Jakarta: ERIA. pp.55-76.
- KLASEN, Stephan, 2002. Low Schooling for Girls, Slower Growth for All? Cross-Country Evidence on the Effect of Gender Inequality in Education on Economic Development. *The World Bank economic review*, vol. 16, no. 3 345–373
- KLASEN, Stephan and LAMANNA, Francesca, 2009. The impact of gender inequality in education and employment on economic growth: new evidence for a panel of countries. *Feminist Economics* 15(3): 91-132.
- KLASEN, Stephan, 2017. *Gender, Institutions, and Economic Development*. Institute for the Study of International Development. GWP-2017-04-Concept Paper.
- KLASEN, Stephan, 2019. *From 'MeToo' to Boko Haram: A survey of levels and trends of gender inequality in the world*, Discussion Papers, No. 263, Georg-August Universität Göttingen, Courant Research Centre - Poverty, Equity and Growth (CRC-PEG), Göttingen.
- Levy, Stephanie and ROBINSON, Sherman, 2014. *Can Cash Transfers Promote the Local Economy? A Case Study for Cambodia*. IFPRI Discussion Paper 01334 March 2014.
- MCKINSEY GLOBAL INSTITUTE (MGI), 2015. *The Power Of Parity: How Advancing Women's Equality Can Add \$12 Trillion To Global Growth*. September 2015. 168p.
- MEINZEN-DICK, Ruth, QUISUMBING, Agnes, DOSS, Cheryl and THEIS, Sophie, 2019. Women's land rights as a pathway to poverty reduction: Framework and review of available evidence. *Agricultural systems* 172 (2019), 72-82.
- MINISTERE DU PLAN, 2011. *Document de la Stratégie de Croissance et de Réduction de la Pauvreté-Deuxième génération : DSCR2 - 2011-2015*. Octobre 2011. Vol.1. 127p.
- MINISTERE DU PLAN, 2018. *PNSD 2019–2023 : Document de travail à l'usage exclusif de membres du Gouvernement et de ses partenaires nationaux et internationaux*. Kinshasa : Direction des Etudes Macro-économiques. 189p.
- MINISTERE DU GENRE, ENFANT ET FAMILLE, 2015. *Plan d'action de la mise en œuvre de la résolution 1325 du conseil de sécurité de nations unies sur les femmes, la paix et la sécurité IIème génération 2019-2022*, 37p.
- MISHRA, Khushbu and SAM, Abdoul G. Does Women's Land Ownership Promote Their Empowerment? Empirical Evidence from Nepal. *World Development*, Vol. 78, pp. 360–371, 2016
- NOVELLA, Rafael, RIPANI, Laura, CRUCES, Guillermo and ALZÚA, María Laura, 2012. *Conditional cash transfers, female bargaining power and parental labour supply*. IDB Working Paper Series, No. IDB-WP-368, Inter-American Development Bank (IDB), Washington, DC
- ORGANISATION DE COOPERATION ET DE DEVELOPPEMENT ECONOMIQUES (OCDE), 2007. *Perspectives de l'emploi de l'OCDE 2007*. Éditions OCDE, Paris, https://doi.org/10.1787/empl_outlook-2007-fr.

- ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE (FAO), 2010. *Genre et droit à la terre : Comprendre les complexités, adapter les politiques*. Perspectives Economiques et Sociales. Synthèses 8.
- ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE (FAO), 1998. *Statistiques et Genre, Recensements Agricoles - Orientations pour une Révision des Concepts et de la Méthodologie*. Rome : Division de la femme et de la population et Division de la statistique.
- PROGRAMME DES NATIONS UNIES POUR LE DEVELOPPEMENT (PNUD), 2015. *Note technique sur la République Démocratique du Congo : Priorités de développement 2017-2021*. Kinshasa. 8p.
- PROGRAMME DES NATIONS UNIES POUR LE DEVELOPPEMENT (PNUD), 2016. *Rapport sur le développement humain en Afrique 2016 : Accélérer les progrès en faveur de l'égalité des genres et de l'autonomisation des femmes en Afrique*. PNUD, New York, USA.
- PROGRAMME DES NATIONS UNIES POUR LE DEVELOPPEMENT (PNUD), 2017. *Inégalités de revenus en Afrique subsaharienne : Tendances divergentes, déterminants et conséquences. Aperçu général*. 64p.
- PROGRAMME DES NATIONS UNIES POUR LE DEVELOPPEMENT (PNUD), 2018. *Gender equality as an accelerator for achieving the sustainable development goals*. PNUD, New York, USA.
- PROSTERMAN, Roy L., MITCHELL, Robert, HANSTAD, Timothy (Eds.), 2009. *One Billion Rising: Law, Land and the Alleviation of Global Poverty*. Leiden University Press, Leiden, The Netherlands.
- QUISUMBING, Agnes R., KUMAR, Neha, 2014. *Land Rights Knowledge and Conservation in Rural Ethiopia: Mind the Gender Gap*. IFPRI Discussion Paper. International Food Policy Research Institute, Washington, D.C. 36p.
- Quisumbing, Agnes R., Maluccio, John A., 2003. Resources at marriage and intrahousehold allocation: evidence from Bangladesh, Ethiopia, Indonesia, and South Africa. *Oxf. Bull. Econ. Stat.* 65 (3), 283–327.
- ROSETTI, Nabbumba and KAKANDE, Margaret, 2010. *Modelling the contributions of reduced gender inequality to GDP growth prospects and poverty reduction*. CPRC (Chronic Poverty Research Center) International Conference 2010.
- SEGUINO, Stephanie, 2017. *Engendering Macroeconomic Theory and Policy*. World Bank. November 2017.
- SEGUINO, Stephanie and GROWN, Caren. 2006. Gender Equity And Globalization: Macroeconomic Policy For Developing Countries. *Journal of International Development* 18: 1-24.
- SEGUINO, Stephanie, 2016. Global trends in gender Equality. *Journal of African Development* 18: 1-30.
- SEGUINO, Stephanie and WERE, Maureen. 2014. Gender, Development and Economic Growth in Sub-Saharan Africa. *Journal of African Economies*.
- STANDING, Guy, 2007. *How Cash Transfers Boost Work and Economic Security*. DESA Working Paper No. 58 ST/ESA/2007/DWP/58 October 2007

- SWEETMAN, Caroline and EZPELETA, Maria, 2017. Introduction: Natural Resource Justice. *Gender & Development*, 25:3, 353-366, DOI: 10.1080/13552074.2017.1395138.
- TEIGNIER, Marc and CUBERES David, 2014. *Aggregate Costs of Gender Gaps in the Labour Market: A Quantitative Estimate*. (Universitat de Barcelona) UB Economics Working Papers 2014/308. 29p.
- TIBERTI, Luca, CICOWIEZ, Martin and COCKBURN, John, 2017. *A top-down behaviour (TBD) microsimulation toolkit for distributive analysis: A manual*. Partnership for Economic Policy toolbox Analytical tools. August 2017.
- UNITED NATIONS. 2015. *Transforming our world: The 2030 Agenda for sustainable development*. New York. August 2015.
- UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP), UNITED NATIONS ENTITY FOR GENDER EQUALITY AND THE EMPOWERMENT OF WOMEN (UN WOMEN), UNITED NATIONS PEACEBUILDING SUPPORT OFFICE (PBSO) and UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP), 2013. *Women and Natural Resources: Unlocking the Peacebuilding Potential*. New York. November 2013. ISBN: 978-92-807-3361-7
- UNION AFRICAINE (UA), 2012. *Liste minimale d'indicateurs du marché du travail et de la formation professionnelle*. Addis Abeba. Avril 2012. 54p.
- WERE Maureen and KIRINGAI, Jane, 2003. *Gender Mainstreaming in Macroeconomic Policies and Poverty Reduction Strategy in Kenya*. Kenya Institute for Public Policy Research and Analysis. 77p.
- ZABSONRÉ, Agnès, AGBO, Maxime and SOME, Juste, 2017. *Gold exploitation and socioeconomic outcomes: the Case of Burkina Faso*, Final Report, PEP. Available at: <https://ssrn.com/abstract=2955942>