



# Papaya Policy Brief C

## Policy for Equity in Zambian Agriculture 2002 - 2016

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### *Executive Summary*

*Policy frameworks in Zambia mainly refer to gender in terms of mainstreaming, ensuring an equitable number of beneficiaries within programmes and the importance of targeting women. However, none offer clear guidelines on how these aims are to be operationalized. In addition, differing gender roles and relations are not explicitly recognized and there are few references to youth. Access to the key Farm Input Support Programme (FISP) requires landholdings of more than 0.5ha and membership in recognized farmers' groups, thus excluding 15-20% of the poorest farmers, among them women-headed households and youth.*

*AFRINT Zambian data 2002-2013 shows how women-headed households have similar numbers of livestock, household labour and adult equivalence scores to married households. However, they still have lower levels of education, less land, hire less labour and have less mobility. Indeed, the panel data shows women-headed households' access to land has decreased since 2002 at the same time as married households' landholdings increased substantially. Both household types show a large increase in the number of livestock. Maize production shows a significant difference between married and women-headed households whilst trends in both maize area and yields do not show statistical significance.*

*Village-level data from Mkushi district shows considerable differences in performance: conservation agriculture increased production and yields considerably in one village, in another, farmers pursued crop diversification focusing on soybeans instead of maize; in a further village, proximity to commercial farms, in meant farmers opted to hire out labour rather than focusing on agriculture. When we look at maize trends in Mkushi by gender, we find no significant differences between women-headed households and married households. In other words, women-headed households have shared in the rapid increases in maize production and productivity from 2002-2013.*

*Actors at the district level are very aware of equity in sustainable intensification. The Sustainable Development Goal of including at least 30% at all levels had also trickled down to the district level with actors now working actively to promote women's participation. Some NGOs in Mkushi were providing free extension services to women and youth. Others provided bicycles for women. Stakeholders suggested a wide range of idea for how equity in sustainable intensification could be improved in Mkushi: to promote land titles for women and youths to access loans; engage churches to assist in breaking cultural and social barriers to participation in agricultural activities; for banks to provide preferential interest rates for women and youths; and for banks to reserve a certain portfolio, such as 30%, of loans for women and youth.*

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This brief outlines the Zambian policy framework and presents trends relating to intensification at the village level. Information is taken from two waves of panel data collected between 2002-2013 within the AFRINT project run by Lund University and from a workshop held with agricultural stakeholders in Mkushi district in December 2016.<sup>1</sup> Stakeholders were asked to provide possible explanations for the trends observed and reflect upon what actors in the sector could do to improve gender and generational equity in sustainable intensification

## National Level Policy Framework and agricultural trends

The guiding policy document for the agricultural sector in Zambia is the Sixth National Development Plan (R-SNDP) aimed at operationalizing the goals laid out in Vision 2030. The Plan focusses on private sector-led agricultural development, but does include measures to enhance productivity and income among small-scale farmers. A National Agricultural Policy (NAP) is currently under revision. Furthermore, a National Agricultural Investment Plan (NAIP) has been developed under the Comprehensive Africa Agriculture Development Programme (CAADP), but the level of implementation is unclear. The latter is the most comprehensive and focuses on smallholders in relation to the Farm Input Support Programme (FISP) which has been extended to a greater number of recipients, albeit with each beneficiary receiving a smaller package than previously. Gender issues are widely, albeit not consistently, referred to in all of these policies, primarily in relation to mainstreaming and ensuring an equitable number of beneficiaries of programmes. These frameworks also mention the importance of targeting women in order to overcome inequities in access, but it is not clear how this is to be operationalized. Differing gender roles and relations are not explicitly recognized. There are few references to youth, or specific measures for youth inclusion.<sup>2</sup> Furthermore, access to FISP requires landholdings of more than 0,5 ha and membership in recognized farmers' groups, thus excluding 15-20% of the poorest farmers, among them women-headed households.<sup>3</sup>

Zambian panel data from AFRINT in 2002, 2008 and 2013 shows the proportion of women-headed households stayed relatively constant at between 20-24% of the total 275 households. The data shows that women-headed households have similar numbers of livestock and household labour as well as adult equivalence scores to married households, but still have lower levels of education, less land, hire less labour and have less mobility (as proxied by bicycle ownership), the latter being important in terms of mobility and access to markets. Table 1 shows that women-headed

<sup>1</sup> See <http://www.keg.lu.se/en/research/research-projects/current-research-projects/afrint>

<sup>2</sup> See Papaya Baseline Background Note for an overview of agricultural policies in Zambia <https://www.agripapaya.com/resources>

<sup>3</sup> Andersson Djurfeldt, A and E Hillbom, 2016, 'Pro-poor agricultural growth – Inclusion or differentiation? Village level perspectives from Zambia, in *Geoforum* 75 (2016) 220-233. The graphic above does not show labels for Munsakamba village in Mkushi nor Nega Nega village in the southern cluster.

households' access to land has stayed constant since 2002 although overall land areas have increased substantially especially for married households. Both women-headed and married households show a large increase in the number of livestock and a slight but significant increase in adult able workers.

*Table 1: Trends through time for key assets 2002 - 2013*

		Zambia		
Paired sample T-tests		2002	2013	Sig.
Land in hectares	Overall	2.99	3.82	***
	Married	3.27	4.41	****
	WHH	2.2	2.0	
Livestock TLU	Overall	1.15	4.82	****
	Married	1.35	5.65	****
	WHH	0.56	2.16	***
Adult able workers	Overall	4.23	5.10	****
	Married	4.36	5.16	****
	WHH	3.83	4.28	
Hired labour - Yes	Overall	125	133	
	Married	100	103	
	WHH	25	29	

Source: AFRINT III dataset, Department of Human Geography, Lund University, Sweden

Table 2 shows how maize production has increased between 2002-2013 among all household types, although the increase is greater for married households. Yields have also increased dramatically.

*Table 2: Maize area, production and yield for all, married and WHH in Malawi and Zambia, 2002 - 2013*

Paired sample T-tests				
Area under maize, 3 year average, hec	All	2002	1,40	**
		2013	1,70	
	Married	2002	1,51	**
		2013	1,80	
	Women HH	2002	1,00	0,11
		2013	1,23	
Maize production, kgs	All	2002	1574,72	****
		2013	3651,83	
	Married	2002	1659,98	****
		2013	4069,38	
	Women HH	2002	1259,82	**
		2013	1973,05	
Yields, kg per hectare	All	2002	1159,93	****
		2013	1998,63	
	Married	2002	1161,40	****

	2013	2032,09	
Women HH	2002	1145,58	***
	2013	1863,71	

Source: AFRINT III dataset, Department of Human Geography, Lund University, Sweden

Table 3 confirms that maize production which shows a significant difference between married and women-headed households. However, trends in yields do not show statistical significance demonstrating that women-headed households have shared in the overall productivity increases during this time period.

*Table 3: Trends in maize cultivation, married and women-headed households*

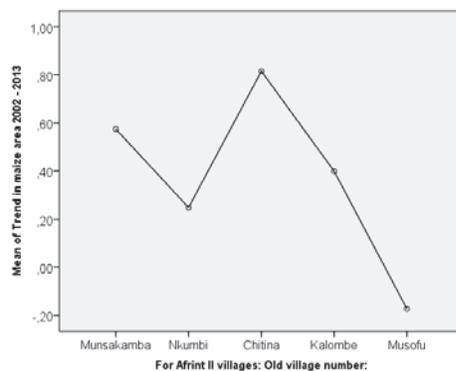
Two-sample T-tests		No.	Mean	Sig.
Area under maize, 3 year average, change 2002 - 2013	Married	190	0,33	0.7
	Women HH	49	0,24	
Maize production, change 2002 - 2013	Married	160	2409	0.03**
	Women HH	47	713	
Yields, kgs per hec, change 2002 - 2013	Married	159	870	0.5
	Women HH	47	718	

Source: AFRINT III dataset, Department of Human Geography, Lund University, Sweden

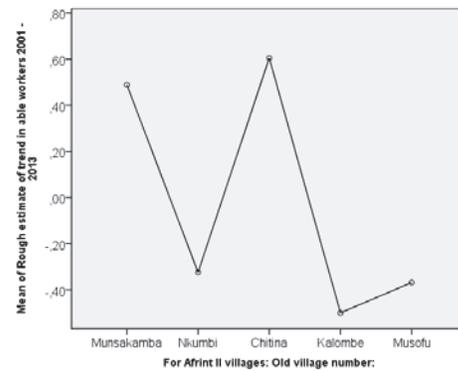
## Village Level Trends

During the district-level workshops, data from villages in Mkushi district in central Zambia were presented to participants. The villages that were part of the AFRINT study include Munsakamba, Nkumbi, Chitina, Kalome and Musofu. The main crop cultivated is maize. As seen in Figure 1, area under maize has increased during the 2002-2013 period in the majority of villages. In Chitina this is explained by the adaption of conservation farming, whereas in Munsakamba maize is a major cash crop. In Musofu, the only village in which the maize area had declined, farmers had pursued crop diversification focusing on soybeans instead of maize. Figure 2 shows that there was a general decline in labour in households. This can be explained by an increased use of private actors offering labour services, greater use of tractors and, in Kalombe, a preference for charcoal burning over farming. Furthermore, the proximity of commercial farms, in Nkumbi for example, means that farmers opt to hire out their labour rather than focusing on their own agricultural activities.

*Fig 1: Trends in maize area, 2002-2013*

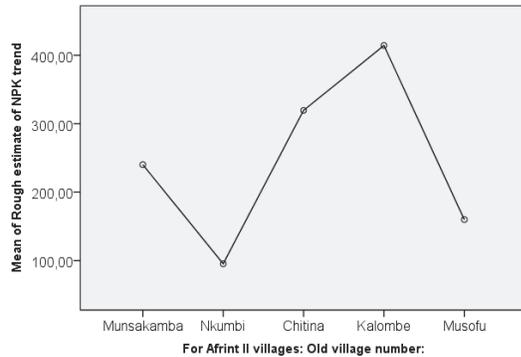


*Fig 2: Trends able workers, 2002-2013*



In relation to fertilizer application (see Figure 3), the high levels in Chitina and Kalombe were explained by increased area whereas the smaller increase in Nkumbi relates to the fact that farmers work on commercial farms. Similarly, the focus on soybean and vegetable production in Musofu requires lower levels of fertilizer application.

Fig 3. Mean NPK fertilizer application on maize, 2002-13



Again, the trends in maize production in Figure 4 relate to the importance of maize production in each village. In Chitina, the high production levels are related to the practice of conservation farming. In Musofu, production was high despite lower levels of fertilizer application which was related to good rainfall patterns.

Fig. 4: Mean trend in maize production, 2002-13

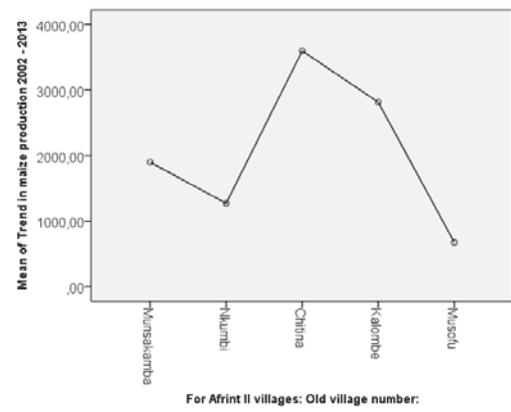


Fig 5: Mean of trend maize yield 2002-13, Kgs

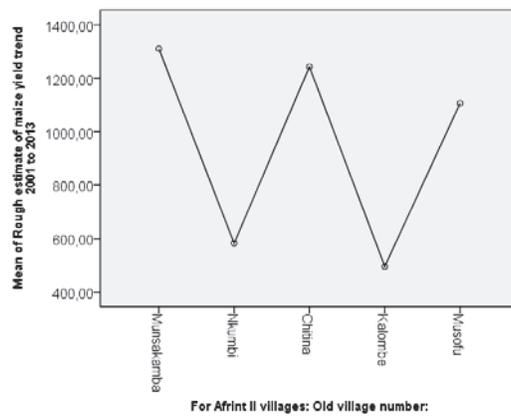


Fig 6: Amount of maize marketed 2008-13, Kgs

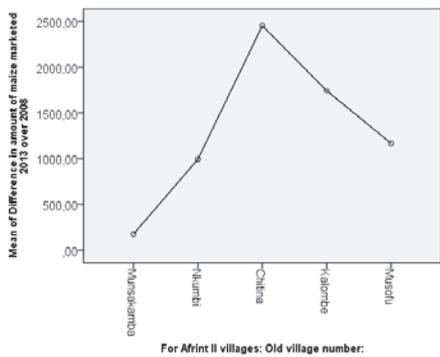
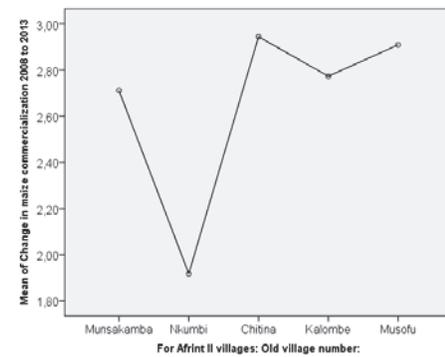


Fig. 7: Difference in amount of maize marketed 2008-13



In relation to commercialization, Chitina marketed the highest levels of maize during the 2008-2013 period. This can be explained by the increase in land productivity in the area and that the FRA started to purchase maize from Chitina in 2011. The low levels observed in Munsakamba could be related to the high population density and presence of hammer-mills meaning that maize is used predominantly for consumption.

When we look at maize trends in Mkushi by gender, we actually find no significant differences between women-headed households and married households. The increase in maize area is around 0.5 hectares for both types of households, trends in able workers are negligible, married households increased fertilizer application by almost a factor of two compared to women-headed households (an increase of 225kgs compared to 125kgs) but due to the small number of women-headed households in the panel no significance is recorded. Whilst production increases have been higher in married households (over 2,5MTs compared to 1.2MTs for women-headed households) productivity increases have actually been higher in the latter (although this is not significant). We now turn to the many actors promoting sustainable intensification in Mkushi, governmental, private and non-governmental organisations.

Although actors did consider equity in their work, many stakeholders were of the opinion that a number of additional measures could improve inclusion of women and youth in agriculture. Table 4 provides an overview of the actors active in the district and suggestions made on measures that could be taken to enhance equity in sustainable intensification. Actors at the district level are very aware of issues relating to equity in sustainable intensification and were encouraged in this by national and workplace policies. The Sustainable Development Goal of including at least 30% at all levels had also trickled down to the district level with actors now working actively to promote women's participation. For example, training sessions have been provided to extension officers to increase their awareness of gender and generation. Some NGOs in Mkushi were providing free extension services to women and youth and others had provided bicycles for women.

Furthermore, FISP implementation includes specific measures to encourage women and youth to participate in farming. These incentives from above, both policy and financial provisions, were deemed to be important as freedom at the individual level is limited. However, extension officers do have opportunities to influence policy by feeding back their experiences from the ground to their superiors. Table 5 outlines opportunities and challenges to further increasing gender and generational equity which Papaya will work from 2017 - 2020.

*Table 4: Actors involved in sustainable intensification and possible improvements in terms of equity*

Actors	Suggested actions to promote equity
Ministry of Agriculture	<ul style="list-style-type: none"> <li>• The MoA should encourage organized women’s groups (e.g. cooperatives) to help them access facilities such as credit;               <ul style="list-style-type: none"> <li>• Encourage WHH to join agricultural groups (participation);</li> <li>• Promote equal representation of males and females in agricultural training;</li> </ul> </li> <li>• Extension workers need to understand the daily activity calendar of women farmers so as to incorporate them when planning for trainings, meetings, etc., thereby enhancing their participation and confidence in agricultural activities;</li> <li>• Promote policy to issue land titles to women and youths to enable them get loans from banks. Most banks require collateral which many women and youths do not have. They thus face difficulties in accessing credit from banks and other financial lending institutions.</li> </ul>
Ministry of Community Development	<ul style="list-style-type: none"> <li>• Consider youths and women to a greater extent, especially widows, for example through providing vouchers that they give out to vulnerable people e.g. for seeds (maize, ground nuts, and soya beans);</li> <li>• Carry out female and youth sensitisation about how agriculture can help empower women and youth livelihoods.</li> </ul>
Agricultural cooperatives	<ul style="list-style-type: none"> <li>• Reserve 30% of positions for women in a deliberate attempt to allow women to have positions and influence decision making in cooperatives;               <ul style="list-style-type: none"> <li>• Men should be encouraged to bring their wives to cooperative meetings.</li> </ul> </li> </ul>
Zambia National farmers' Union	<ul style="list-style-type: none"> <li>• Carry out sensitisation of communities and traditional leaders on the importance of gender and youth involvement in agriculture;</li> <li>• Engage churches to assist in breaking cultural and social barriers to women and youth participation in agricultural activities;</li> <li>• Make and enforce policies such as reserving 30% of positions for women and youth in all programmes and incentives for farmers;</li> <li>• Women and youth could be given additional schedules for meetings to enable them to attend and participate in these meetings;               <ul style="list-style-type: none"> <li>• Promote traditionally ‘female’ crops such as groundnuts and sweet potatoes to increase women’s participation;</li> </ul> </li> <li>• Deliberate design of information packages on farming activities that encourage and promote household approaches and running promotions on inputs for example female participation in farming ventures and its benefits.</li> </ul>
Ministry of Fisheries and livestock	No information
Ministry of general Education	No information
Conservation Farming Unit (CFU)	No information

Development AID from People to People (DAPP)	<ul style="list-style-type: none"> <li>• Reach out to more people through behavioural change;</li> <li>• Increase the number of areas where they operate to reach out to more people and encourage women and youth participation in agricultural activities;</li> <li>• Scaling up the e-voucher system to be able to give farming inputs to females and youth farmers and be able to monitor how they are doing in terms of production. This would be empowering for women and youths as they lack capital to start up farming activities.</li> </ul>
Musika (Market) helping farmers to acquire mechanisation	<ul style="list-style-type: none"> <li>• Provide agricultural trainings to women and youths and link them to organisations providing services, credit and markets to the farmers</li> </ul>
Women and youth clubs	No information
Zambia Rain Ball Development Fund (ZRDF)	<ul style="list-style-type: none"> <li>• Include more female and youth farmers in agricultural trainings provided for farmers.</li> </ul>
Village iduanas, chiefs and churches	<ul style="list-style-type: none"> <li>• More women should be appointed by chiefs as <i>indunas</i> and advisors so that they can have a voice and fight for the rights of their fellow women.</li> <li>• Village heads should be involved in all agricultural activities so that there is buy in into the agriculture activities being carried out by the district agriculture officers.</li> <li>• Churches also need to be engaged to assist in breaking social and cultural norms which hinder women and youth participation in leadership roles. This can be done by advocacy during church gatherings.</li> <li>• Sensitisation of traditional leadership on the importance of women and youth participation in agriculture. This will be an approach that will involve all stakeholders concerned to help women and youths to improve their agricultural activities.</li> </ul>
AFGRI (product market)	<ul style="list-style-type: none"> <li>• Provide loans to women and youths money at reduced interest rates and extend the payback period. Most women and youths do not have start-up capital to engage in agricultural activities. Provision of inputs to youths and women should be prioritised. In terms of trading, women and youth should also be given priority when selling in order for them to realise profits from their agricultural produce.</li> </ul>
Agro dealers	<ul style="list-style-type: none"> <li>• Involve women and youths by having a deliberate policy to give them demonstration plots and training.</li> <li>• Increase sensitization about the safe use of chemicals-herbicides and help remove the belief that spraying is a man's job.</li> <li>• Promote personal safety clothing suited for women and youths and encourage women and youths to be agro-dealer agents</li> </ul>
Seed companies	<ul style="list-style-type: none"> <li>• Increase awareness of seed varieties among women headed households and youths.</li> <li>• Sensitise and empower women and youth to meet the requirements for out-grower schemes (to become seed growers, sellers and agents).</li> <li>• Encourage women to be seed sellers/agents and increase the allocation of demonstration plots to women and youths.</li> </ul>

Farmers (Commercial and small scale)	No information
Credit organisations (Banks loaning for agriculture)	No information
Food and Agriculture Organisation (FAO)	No information
World Food Programme (WFP)	No information
Food security pack (FSP) under ministry of community development and social welfare	No information
Banks	<ul style="list-style-type: none"> <li>• Provide preferential interest rates for women and youths as many women and youths cannot afford the current high interest rates when borrowing money; <ul style="list-style-type: none"> <li>• Reserve a certain portfolio, for example reserving 30% of loans for women and youths;</li> <li>• Reach out more to women and youths for bank accounts with minimal bank book balances and interest rates.</li> </ul> </li> </ul>

*Table 5: Opportunities and challenges to equity in sustainable intensification at district level*

Actors	Opportunities	Challenges
Ministry of Agriculture	<ul style="list-style-type: none"> <li>• If women and youths form/join cooperatives it will be easier for the Ministry to work with them.</li> <li>• The government is currently promoting gender and youth in agriculture which makes it easier for agricultural officers to engage directly.</li> <li>• Donor projects often channelled through the Ministry, so if women and youths already engaged it is easier for them to get support from other actors too.</li> <li>• The Ministry are able to offer trainings and free extension services.</li> <li>• Engagement with the Ministry can also provide access to resources and markets.</li> <li>• The current policy of including 30% women can also help them access infrastructure projects such as the building of roads and shades for storage.</li> <li>• The Ministry can help monitor and evaluate intensification activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Erratic funding;</li> <li>• Lack of adequate transport;</li> <li>• Extension officers to not have appropriate gear for riding making it hard for them to move in farming areas, especially during rains;</li> <li>• Erratic funding affects storage facilities that are available to women and youth;</li> </ul>
Women and youth clubs	<ul style="list-style-type: none"> <li>• Organizing in clubs can facilitate access to ministry programmes and to financial services.</li> </ul>	No information
Villages iduanas, Chiefs and churches	No information	<p>Cultural and societal norms are hindering women and youth from participating fully.</p> <ul style="list-style-type: none"> <li>• expectation that women should be in the home,</li> <li>• women and youth should defer to men in meetings.</li> <li>• That men dictate capital projects in their homes</li> <li>• women often do not have the right to choose what they grow or how they manage and sell their produce</li> </ul> <p>This is exacerbated by low levels of literacy among women, that women do not know their rights and do not have confidence to participate in intensification activities.</p> <ul style="list-style-type: none"> <li>• High workload of women affects their availability to participate in intensification activities.</li> </ul>
Agro dealers/seed companies	<ul style="list-style-type: none"> <li>• Women and youth usually interact with these dealers and seed companies. They could thus offer trainings in seed growing, enabling women and youth to access markets once they harvest</li> </ul>	<ul style="list-style-type: none"> <li>• Usually focussed on quick profits, and if projects are long term it is hard to get support;</li> <li>• Inadequate transport to reach women and youths in very rural</li> </ul>

	their crops.	areas.
Farmers (Commercial and small scale)	No information	<ul style="list-style-type: none"> <li>• Poor adoption rates in relation to new farming technologies.</li> </ul>
Banks	<ul style="list-style-type: none"> <li>• Money available and set aside for lending.</li> <li>• If women and youth accessed loans they could engage in agricultural intensification activities.</li> <li>• Possible to save money through opening back accounts facilitating access to loans. Cooperatives can be used as collateral for these loans.</li> </ul>	<ul style="list-style-type: none"> <li>• High interest rates;</li> <li>• High loan processing challenges;</li> <li>• Limited availability of loans, especially when no collateral;</li> <li>• Societal and cultural norms hinder women and youths from engaging directly with banks;</li> <li>• Illiteracy among women and youths challenge to access loans as they demand written business plans.</li> <li>• Women and youth often do not meet requirements for loans, such as being able to provide previous year's records.</li> </ul>



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