

# Thinking 'Graduation' from the Farm Input Subsidy Programme in Malawi

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## Background and Context

Due to the high incidence of poverty and food insecurity among Malawi's rural population, agricultural input subsidies can be seen as, in part at least, a social protection instrument, as they improve access and availability of food to vulnerable groups. However, questions about the sustainability of the Farm Input Subsidy Programme (FISP) have been raised since its introduction in 2005/06. Some have argued that with limited public resources and other competing needs of development, subsidization of farm inputs for a food staple may not be the best use of scarce resources, justifying calls for an 'exit' strategy. Others, however, describe the subsidy as a good thing in so far as it addresses chronic food insecurity in Malawi and contributes to inclusive economic growth and poverty reduction.

This debate has been fuelled by a lack of articulation on the processes of graduation both in programme design and in the medium term strategy of the FISP. Can Malawi afford such a massive programme under very tight fiscal constraints in the long-run? Can incorporation of 'graduation' in the design and implementation of the programme facilitate the scaling down of the programme? Some households have been on the programme since it started, do these have higher prospects of graduation?

## Graduation and Social Protection

The concept of graduation in social protection programmes has generally been linked to issues of impacts, dependency, exit and sustainability. Graduation from social protection has important implications for outreach and cost effectiveness, as it allows providers to scale down their operations and reduce costs over time. Governments with tight budgets may be more willing to support social

protection if access is time-bound or if there are clear prospects of a high proportion of target beneficiaries voluntarily exiting over time.

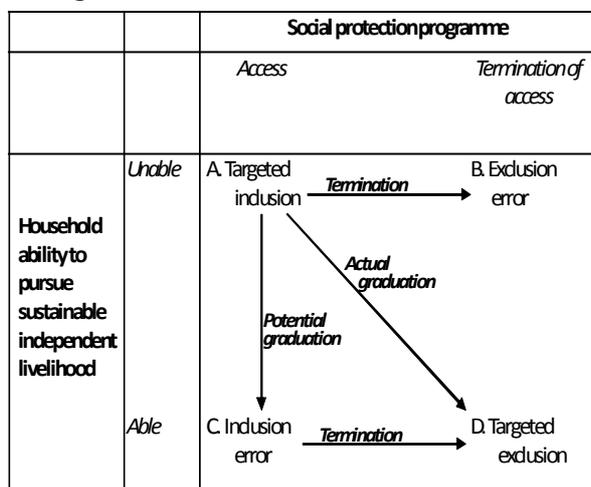
There are several definitions on what constitute graduation from social transfers, generally embodying changes from livelihoods dependent on social protection to livelihoods that can continue independent of social protection. From a programme design perspective, social protection programmes can be open-ended or time bound. Open-ended programmes (such as pensions) are not designed with any expectation of graduation. Time-bound programme transfers, however, are temporary and implemented with complementary measures intended to enable a large number of households to build their capabilities to embark on independent livelihoods. Graduation is therefore viewed as the potential to embark on sustainable, independent livelihoods without social protection – pursuing an independent sustainable livelihood.

Graduation is thus a removal of access to the programme that 'does not leave current beneficiaries supported by the programme unable to pursue sustainable independent livelihoods'. It is important to distinguish between a process of becoming able to pursue an independent sustainable livelihood (potential graduation) and actual graduation, with termination of support but continued successful pursuit of an independent sustainable livelihood. Actual and potential graduation are also distinguished from 'termination', the removal of access to social protection without potential graduation. These distinctions are explored in Figure 1 where a movement from left to right (from A or C to B or D) represents the termination either of access to programme benefit or of a programme itself, a movement from A to C downwards represents potential graduation, and a movement from A to D represents actual graduation.

Such graduation can occur at multiple levels: household, area and national levels. At household level, individual households develop capabilities to

'step up' and or 'step out' to engage in independent and sustainable livelihoods. At area or national levels, sufficient numbers or proportions of households in the population develop capabilities for independent and sustainable livelihoods, allowing scaling down of the programme.

**Figure 1 Termination, potential graduation and actual graduation**



However, there are complex and difficult challenges in defining and measuring graduation criteria, or determining the point at which social assistance can be terminated i.e. the thresholds of assets or incomes that are necessary for graduation. Alternative approaches include the crossing of income poverty lines or the crossing of asset and income thresholds, which are likely to vary with household structures, initial conditions, socio-economic and cultural context, and livelihood strategies and opportunities.

### Conditions Facilitating and Impeding Graduation

The extent to which graduation occurs in a social protection programme depends on many factors including targeting, the nature and value of transfer benefits, duration of access, and existence of complementary interventions that strengthen household capabilities. Complementary investments may include, for instance, programmes that integrate beneficiaries into the market economy or that facilitate access to financial services or training in enterprise management. Another critical factor is the state of the economy in which graduating beneficiaries are embedded. Depending on whether beneficiaries form a large part of the local or wider economy or are located in a poorly developed economy with thin markets, multi-scale interactions between

national and household levels will play important roles.

However, these have to be understood within the social and political influences on the processes and decisions in graduation from social protection, influences which have been taken into account in the design, implementation and evaluation of graduation and termination in social protection programmes.

### Thinking Graduation in FISP

The FISP attempts to resolve the 'low maize productivity trap' whereby large inter year maize price instability means that fear of high maize prices forces large numbers of poor, maize deficit farmers to grow as much maize as they can, even though they cannot afford to purchase high yielding seeds and fertiliser, with consequent low land and labour productivity and incomes.

Substantial input price reductions through the FISP provide a means for addressing problems of both profitability and affordability, with different impacts on different types of households. This should lead to increases in labour, land and capital productivity among households. Understanding these different impacts, and how they impact on wider non-agricultural incomes and markets, is important for assessing potential processes for graduation from agricultural input subsidies.

The impacts of FISP depend on seasonal finance constraints experienced by households receiving vouchers, constraints which may lead to a) sale of input vouchers, b) use of vouchers to increase input application, or c) displacement of commercial purchases. The use of vouchers to increase input use should lead to increased maize production, increasing maize stocks and lowering maize prices, consequently increasing real incomes of poor maize buyers. Higher input use should also lead to increased demand and supply for input services, and higher real incomes should lead to increased investment in farm and non-farm activities, and to increased demand for farm and non-farm produce and services.

However, it is important that the benefits of the programme (increasing maize productivity and diversification) should be strengthened by complementary investments that promote higher responses to fertilisers and/ or lower transport and market costs, as well as low and stable maize prices and livelihood and market opportunities for farm and non-farm diversification.

### Graduation Pathways in the FISP

For graduation to occur at national, area and household levels, the core requirement is that

removal of access to the subsidy programme does not reduce land, labour and capital productivity in maize production. For this to occur, therefore, 'potential graduation conditions' are required in some combination as a result of and during the implementation of the FISP. These comprise:

- Falls in unsubsidised input prices compared to pre-programme prices, with, for example, improved transport systems and management of implementation and distribution of inorganic fertilizers.
- Reduced requirements for purchase of previously subsidised inputs due to increased efficiency in use. This can be achieved, for instance, by greater use of high yielding seed, timely planting, more effective soil health management, timely weeding, more effective fertiliser application methods, and greater use of complementary organic fertilisers.
- Reduced requirements for purchase of previously subsidised inputs due to substitution by cheaper inputs – through for example increasing use of organic fertilizers, legume cultivation and rotations.
- Increased working capital among poor beneficiary households for cash purchase of previously subsidised inputs – for example through increased savings or income diversification.
- Poor beneficiary households' diversification out of maize production through either transfer of land to other high value production use (diversification or stepping out of maize within agriculture) or transfer of land to other users (diversification or stepping out of agriculture into non-farm activities).
- Access to low cost credit by poor beneficiary households for purchase of previously subsidised inputs – for example, by introducing innovative and low cost microfinance systems.

The speed at which it is reasonable for these changes to become effective in promoting potential graduation will depend upon households' initial structures and resource holdings, their receipt of subsidised inputs over the life of the subsidy programme, events and shocks affecting their welfare and resources, and changes in the local and wider socio-economic environment – which will depend in part upon subsidy implementation

and responses within their own communities and beyond.

With respect to programme design and implementation to promote graduation, three broad approaches can be invoked: reduction in subsidy per beneficiary household; reduction in the number of areas or districts served by the programme, with phased withdrawal of the programme from particular areas or districts; and withdrawal of the programme from particular households. Implementing of these requires consideration of budgetary constraints, political factors, efficiency differentials and potential graduation.

## Prospects of Graduation from FISP

The FISP has been hailed as achieving household and national food security during the period it has been implemented. Although the precise incremental production in maize is not known with certainty, various studies have shown that there has been incremental maize production and fewer food stresses even in periods in which prices of maize rose. Increased maize production is also partly attributed to the good rains that the country has witnessed since 2005/06. However, the critical question with respect to graduation is whether these positive impacts of the subsidy programme are consistent with 'potential graduation conditions'. The impacts on the subsidy programme can be at an economy wide national (macro) and community level and/or at an individual household level, with interactions between economy wide and household effects. The economy wide effects imply that both recipient and non-recipient households benefit from the implementation of the programme while individual household effects focus more on recipient households relative to non-recipient households.

Various studies suggest that economy wide effects have been important channels through which the input subsidy has impacted on livelihoods in the economy. Critically, maize prices have fallen relative to increases in wages, implying an increase in real incomes of the rural population. These positive impacts have also been facilitated by the macroeconomic stability that prevailed between 2005/06 to 2010/12 in terms of single digit inflation, positive agricultural growth and growth of the economy, although the public debt increased.

The importance of economy-wide effects relative to individual beneficiaries' effects is also supported by informal economy model simulations. These reveal that beneficial indirect effects may be greater than direct impacts in maize growing areas with high rates of poverty incidence and high land pressure. Such indirect effects arise through

increases in the ratio of wages to maize prices, and benefit poorer households (who sell *ganyu* labour and buy maize) while potentially harming in the short term the incomes of less poor buyers of *ganyu* labour and sellers of maize (these households should however gain in the medium and long run from increased livelihood opportunities with wider economic growth). Allowing recipients to save from receipt of subsidies does not lead to significant gains from the basic scenario, consistent with the weak evidence on asset accumulation.

However, on the negative side, analysis of household data suggests that the FISP crowds-out some private sector commercial sales of fertilizers and seeds to FISP beneficiaries - although rates of displacements have varied across years and aggregate fertiliser imports and sales have increased in recent years, despite falls in subsidised volumes. Displacement rates are a function of targeting; and as long as the targeting criteria and outcomes remain broad and wide, displacement remains an issue of concern for private sector input market development.

At individual household level, research carried out using panel data has revealed mixed results on the impact of the subsidy programme on recipient households relative to non-recipient households. While the relationships between receipt of subsidies and some welfare indicators at household level are positive, on many indicators the recipient households are not significantly better than the non-recipient households. Weak relationships with subsidy receipt are found for self-assessment of adequacy in food consumption and of food security, asset accumulation, and self-assessment of poverty and well-being. These weak relationships may be due to stronger economy-wide effects benefiting both recipient and non-recipients, thereby masking differences at household level.

Nonetheless, there is evidence of a stronger positive association between access to the subsidy and human development at household level. In particular, studies have shown that compared to the period without FISP primary enrolment increased and under-5 illness declined significantly at household level particularly among those households accessing subsidies more than 4 times. Households with access to subsidized fertilizers also tend to experience a smaller number of shocks and stresses, and are unlikely to experience

agricultural-related shocks and stresses as their most severe shocks.

The potential for graduation for households partly depends on their initial conditions prior to subsidization. One of the 'potential graduation conditions' noted above is increased working capital among households for purchase of commercial inputs. This is tested in a study of the relationship between initial conditions and household purchases of commercial fertilizers. Survey data show that in the medium to long-term, input subsidies stimulate demand for commercial purchases and that initial conditions matter. For instance, initial conditions such as elderly household heads, poverty, and family labour constraints depress households' commercial purchases of fertilizers. This suggests that households with these characteristics have low potential to graduate from the subsidy programme. The implication is that very poor households and households with labour constraints require different kinds of social assistance rather than input subsidies.

## Conclusions and Lessons

Graduation, at area and/or household level, is not articulated in the design and implementation of FISP, yet one way in which the success of the programme can be measured in the medium to long-term is its potential to graduate some households, leaving them with independent sustainable livelihoods able to withstand moderate shocks and stresses. We contend that graduation should be seen from a point of view of facilitating independent sustainable livelihood activities at area or household level, and programme termination for some areas or some households within areas should be based on achieving this goal. This is different from a focus on 'exits' from the programme - which is concerned with programme termination, not with graduation.

The extent to which the subsidy programme graduates some areas or households in the medium to long-term should be included as one indicator of success of the programme. The design and implementation of the programme should facilitate the promotion of 'potential graduation conditions' including efficiency in input use, improvements in working capital, integrated soil fertility management and falling input prices.

The issue of graduation is, however, complex, in definition and measurement, and in its operationalization in programme design and implementation. In addition, programme termination involves socio-cultural and political decisions that are not easy to make in electoral

cycles. It is, however, important that complementary measures and policies are put in place to promote potential graduation by enhancing the capacity and capabilities of beneficiaries within the wider economy and market systems. These must then be followed up by processes leading to actual and sustainable graduation from farm input subsidies, not simply termination of these subsidies. Both the achievement of potential graduation and the implementation of actual graduation modalities need to be pursued with careful consideration and extensive consultation.

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This **Policy Brief** is based on the following papers:

Chirwa, E.W., Dorward, A. and Matita, M.M. (2011) *Conceptualising Graduation from Agricultural Input Subsidies in Malawi*. FAC Working Paper 029. Future Agricultures Consortium, Brighton, Sussex.

Chirwa, E.W., Dorward, A. and Matita, M. (2011) *Initial Conditions and Changes in Commercial Fertilizers under the Farm Input Subsidy Programme in Malawi: Implications for Graduation*. FAC Working Paper 030. Future Agricultures Consortium, Brighton, Sussex.

Chirwa, E.W., Matita, M.M., Mvula, P.M., Dorward, A. (2011) *Impacts of the Farm Input Subsidy Programme in Malawi*. Paper prepared for Malawi Government / DFID Evaluation of Malawi Farm Input Subsidy Programme. School of Oriental and African Studies, University of London.

Dorward, A and Chirwa, E. (2012) *Informal Rural Economy Modelling of Programme Impacts, 2005/6 to 2010/11*. Discussion Paper, Evaluation of Malawi Farm Input Subsidy Programme. School of Oriental and African Studies, University of London.

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