Briefing Notes

Starter Pack and TIP:

What does the evidence tell us?

These briefing notes are based on the evidence collected over three years of research into smallholder agriculture, free inputs programmes and food security in Malawi. The research was carried out by independent consultants as part of the M&E programme for Starter Pack (SP) and the Targeted Inputs Programme (TIP), funded by DFID. It includes nationwide surveys, participatory studies combining qualitative and quantitative data collection, and case studies based on semi-structured interviews (see below – **References**).

We have built up a strong body of evidence about the smallholder farm sub-sector in Malawi – its constraints, challenges and relationship with free inputs. However, the studies do not claim to look in detail at related topics such as medium/large-scale farms and estates, the NFRA, informal cross-border trade or the capacity and constraints of private traders and retailers. Some of these topics have been researched by others, while some require further investigation.

The following notes allude to some of the commonly-held beliefs about smallholder agriculture and free inputs, and considers whether or not the evidence supports these beliefs.

Under-production and crisis

"The big maize harvests of 1998-99 and 1999-2000 were a result of good weather conditions. It isn't possible to say that they were a result of SP".

The good weather of the 1998-99 and 1999-2000 seasons certainly contributed to the big maize harvests. However, it *is* possible – through the control group comparisons in our surveys – to say what percentage of the harvest came from Starter Pack (SP). We estimate that 16% of the summer 1999-2000 smallholder maize harvest came from SP – around 350,000 metric tonnes.

"The 2002 food crisis was due to bad weather in the 2000-01 season".

Although bad weather played a role, more important factors were a) the sharp increase in the price of fertiliser owing to the depreciation of the Malawi kwacha in 2000, and b) the reduced contribution from free inputs. SP was scaled down from a universal programme reaching nearly 3 million farmers to a targeted programme reaching 1.5 million. In addition, the amount of fertiliser provided was reduced to 10kg from 15kg in the 1999-2000 season and the packs were delivered too late for planting in many areas. The 2001 harvest was 30-40% lower than the 2000 harvest, and the contribution from the 2000-01 TIP was estimated at 80,000 tonnes. In 2001-02, the TIP contribution was only an estimated 40,000 tonnes.

"The 2002 food crisis was due to the Malawi government's decision to sell the maize reserves".

The food crisis was exacerbated by the decision to sell the reserves, but this was not the underlying cause of the crisis. The underlying cause was the maize production deficit, estimated at 600,000 tonnes owing to the bad 2001 harvest. There is no evidence to suggest that production of other foods, such as cassava and rice, compensated for this shortfall in maize production. A maize production deficit of this size is bound to put upward pressure on food prices. Soon after the 2001 harvest, the price of maize began to rise sharply as supply shortfalls became apparent. The price of maize rose from MK6 in August 2000 to MK17 in September 2001 and reached a peak of around MK36 in January-March 2002. Better management of the 160,000 tonnes of

reserves would have helped reduce the severity of the crisis (by curbing the price increases somewhat), but could not have made up for the production shortfall of 600,000 tonnes.

"High maize prices are good for farmers because they get a good price for their crops".

This may be true for commercial farmers, such as medium/large-scale farmers and estates, but it is not true for smallholders[1]. Most of the maize that they produce is to feed their families (i.e. for consumption rather than sale). Although they sell some maize just after the harvest to buy other basic needs items, they obtain much more cash from sales of 'cash crops' than from sales of maize.

On the other hand, 67% of farmers ran out of maize from their own gardens within 6 months of the 2001 harvest. Then they had to buy (or work as *ganyu* labourers for) maize and were hit by rising prices. As smallholder farmers are net purchasers of maize, particularly in the hungry period, they benefit from *low* maize prices.

"The food crisis is an emergency. It can be dealt with by importing food".

It is true that food imports can be used to cover the deficit in production – assuming that it is possible to obtain enough food from external suppliers and import it quickly enough. However, the idea that the current crisis is an 'emergency' suggests that it is a one-off event which will not be repeated on a regular basis – so imports will only be needed in the *short term*. This is not the case. In the absence of a large-scale free inputs programme, Malawi will continue to under-produce owing to the inputs constraint (see below – **The inputs constraint**). The 'emergency' will be repeated year-in year-out until this constraint is addressed.

[1] The average smallholder farmer cultivated only 0.8-0.9 ha of land in 2001-02.

The inputs constraint

"If the price of maize falls sharply, this creates a disincentive for maize production in the following season; conversely, a rising price will provide an incentive to produce more".

The logic of maize production in the smallholder sub-sector – unlike commercial farming – is *not* determined by output prices. The aim of the smallholder farmer is to produce as much food as possible, given the constraints that he/she faces (land, labour and inputs). This attempt to maximise food production is explained by smallholders' risk adversity (the view that it is risky to depend on the market for food, as it might become scarce or too expensive) and their cultural values (the view that growing your own food makes you respectable). Smallholders generally *subsidise* maize production with income from other sources – mainly sale of cash crops and livestock, *ganyu* labour, small businesses and remittances.

Prices probably do play a role in the decisions of commercial farmers about how much maize to produce. However, there may also be other factors involved – such as whether alternative crops offer better returns; whether maize is produced for food or seed; and what proportion goes to the market versus sales to government. The lack of response by commercial farmers to rising maize prices in the 2001-02 season suggests caution about assuming that an increase in maize prices will automatically lead to higher production, or vice versa. More research is needed on this topic.

"Free inputs create a culture of dependency. Farmers wait for handouts and become lazy".

The 2000-01 evaluation found that smallholder farmers were generally hard-working but constrained by lack of purchasing power to buy inputs. In the 2001-02 season, only one-third of

farmers that did not get TIP used *any* fertiliser on their crops, and only one-quarter of these used more than 10 kg of fertiliser. Yet farmers are desperate for good inputs because soil fertility is low and seed stocks are degraded. They know that in the absence of fertiliser and improved seed, their productivity is low. Free inputs boost morale and enable farmers to work productively on their gardens.

"A general subsidy on the price of fertiliser would be better than SP".

There is nostalgia about the past, when fertiliser prices were subsidised and more smallholders could afford to buy it. But a general fertiliser subsidy has two disadvantages compared with a free inputs programme: a) a general subsidy benefits the richer commercial farmers, who do not need the help to buy inputs, whereas SP is targeted to the sub-sector of poor smallholders that most needs the support; and b) a general fertiliser subsidy does not introduce new, good-quality seed, which is equally necessary for increasing productivity and for diversification (see below – **Food security and development**).

The optimal size of SP

"We must avoid a maize surplus because prices might decline too far".

If low maize prices are good for small farmers (see above – **Under-production and crisis**) we should aim to raise output and bring down prices. A **universal SP** would help to achieve this. Lower maize prices may lead to a reduction in production by the estates, but, as they only account for 10% of total maize production, it is highly unlikely that a decrease in estates' production will offset the gains in the smallholder sub-sector.

It would be possible to implement a **'near-universal' SP**, covering 80% of smallholders because it seems that communities could agree to exclude the wealthiest 20% without producing the allegations of unfairness, secrecy and corruption at village level that have accompanied targeting of TIP packs. But this would have a low production and food security impact.

"There was over-registration for the universal free inputs programmes – the 1998 census shows that there are fewer than 2.86 million rural households (the size of universal SP)".

The 1999-2000 SP evaluation included a study comparing the 1998 census and the SP register. The findings suggested that the 1998 census seriously undercounted the rural population. The study estimated that there are 2.8 million rural households with 4.1 people on average, making a rural population of 11.5 million[2]. This was roughly the size of the 1999-2000 universal SP programme. Further studies would be helpful to estimate the current size of the rural population. There is some recent evidence that the number of households has decreased slightly, perhaps because households have merged due to the hunger crisis.

"Universal free inputs programmes are fiscally unsustainable".

We would argue that *not* having a universal or near-universal free inputs programme is fiscally unsustainable, since the alternative is to continue importing on a large scale to meet the production deficit. Imports cost much more than growing the food with SP.

Targeting

"In the 2000-01 and 2001-02 TIPs, free inputs were given only to the poorest of the poor".

This was the intention, but it did not happen. In 2000-01, with packs only available for 1.5 million households, village leaders were asked to target the

[2] The 1998 census records 1.95 rural households with 4.4 people on average making a rural population of 8.5 million.

poorest 52% of households. In 2001-02, with packs only available for 1 million households, village leaders were asked to target the poorest 35% of households. They were given quotas for each village and told to set up task forces to select beneficiaries according to certain criteria. This did not result in poverty targeting in either year, for three main reasons: 1) some of the main criteria were not correlated with poverty; 2) village heads and task forces selected themselves and their relatives first, at the expense of poorer farmers; 3) communities are reluctant to identify 'the poorest of the poor', saying 'we are all poor here'.

"Geographical targeting would be better than community targeting".

The targeting which took place for TIP has undermined the authority of many village heads and lead to social divisions, including refusal by non-recipients of TIP to take part in development work. This is because communities had to *exclude* deserving farmers from receiving TIP. If targeting is necessary due to lack of resources for a universal SP, geographical targeting would be better than community targeting. Divisions within communities would be avoided if whole areas were excluded rather than some people within villages. This is feasible. For instance, the wealthier northern region needs less assistance than the south and centre. However, providing packs for only part of the country would be likely to cause political problems. One alternative would be 'rotation', with different areas receiving packs each year.

The private sector

"Free inputs have a negative impact on the private sector".

There is evidence that demand for fertiliser from non-recipients of SP/TIP is marginally higher than demand from recipients of SP/TIP. However, this pales into insignificance in the context of the weak demand for fertiliser. Emerging private suppliers of fertiliser have suffered far more in recent years from the combination of low farmer incomes and rising fertiliser prices than from SP/TIP.

"The food deficit will be covered by the private sector".

The private sector did not respond to the high price of maize in January-March 2002 by increasing imports substantially to meet demand. Supply bottlenecks, lack of capacity or oligopoly structures may have hindered a rapid response. Further research is needed on this topic.

Food security and development

"Smallholder farmers are subsistence farmers; they grow their own food and have weak links with markets".

In fact, smallholders have relatively strong links with markets. In particular, they are dependent on markets to buy food to make up for shortfalls in own food production. The macro-level impact of SP – increased production, lower maize prices – was key to increased food security in 1998-99 and 1999-2000 because farmers could afford to buy more food.

"SP emphasises maize production, undermining efforts to promote agricultural diversification".

The focus of SP and TIP has been on maize, but the packs also contain legumes, and have been highly successful in increasing cultivation of beans, soya beans and groundnuts in Malawi. There is potential for further diversification of pack contents, and even for 'unpacked SPs' for root crop producers (e.g. plots managed by extension staff where high-productivity cassava is grown and cuttings are made available to smallholder farmers).

"Malawi cannot keep on relying on free inputs. There must be an exit strategy".

In our view, the exit strategy should address the weak demand of smallholder farmers (lack of purchasing power). It should be based on a medium-term programme of rural development focusing on boosting farmer income (e.g. through crop marketing, rural infrastructure, small business and job creation schemes). This should eventually enhance smallholder purchasing power and make it unnecessary to continue supplying free inputs. Criteria for 'graduation' from SP could be established, linked to the impact of the rural development programme.

"SP is a rural development programme – it can help lift people out of poverty".

SP is not in itself a rural development programme. SP alone can do little to lift people out of poverty. However, it makes a major contribution to food security, which is an essential pre-requisite for good health, ability to learn in school and participation in development programmes. It also helps avoid erosion of livestock assets (which are sold during food crises).

Logistics

"Procurement and delivery are key factors for the success of SP".

Timing of delivery is crucial for the success of a free inputs programme. In order for packs to reach farmers on time, procurement needs to be organised well in advance, especially for seed. In particular, the MoAI needs to plan ahead to ensure that enough OPV maize seed, as well as the appropriate type of legume seed, is produced for the Starter Packs.

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The above reports, together with data sets, materials produced during workshops with farmers and Microsoft PowerPoint presentations by the consultants, can be obtained on CD-ROM from DFID-Malawi or from Sarah Levy: s.b.levy@reading.ac.uk