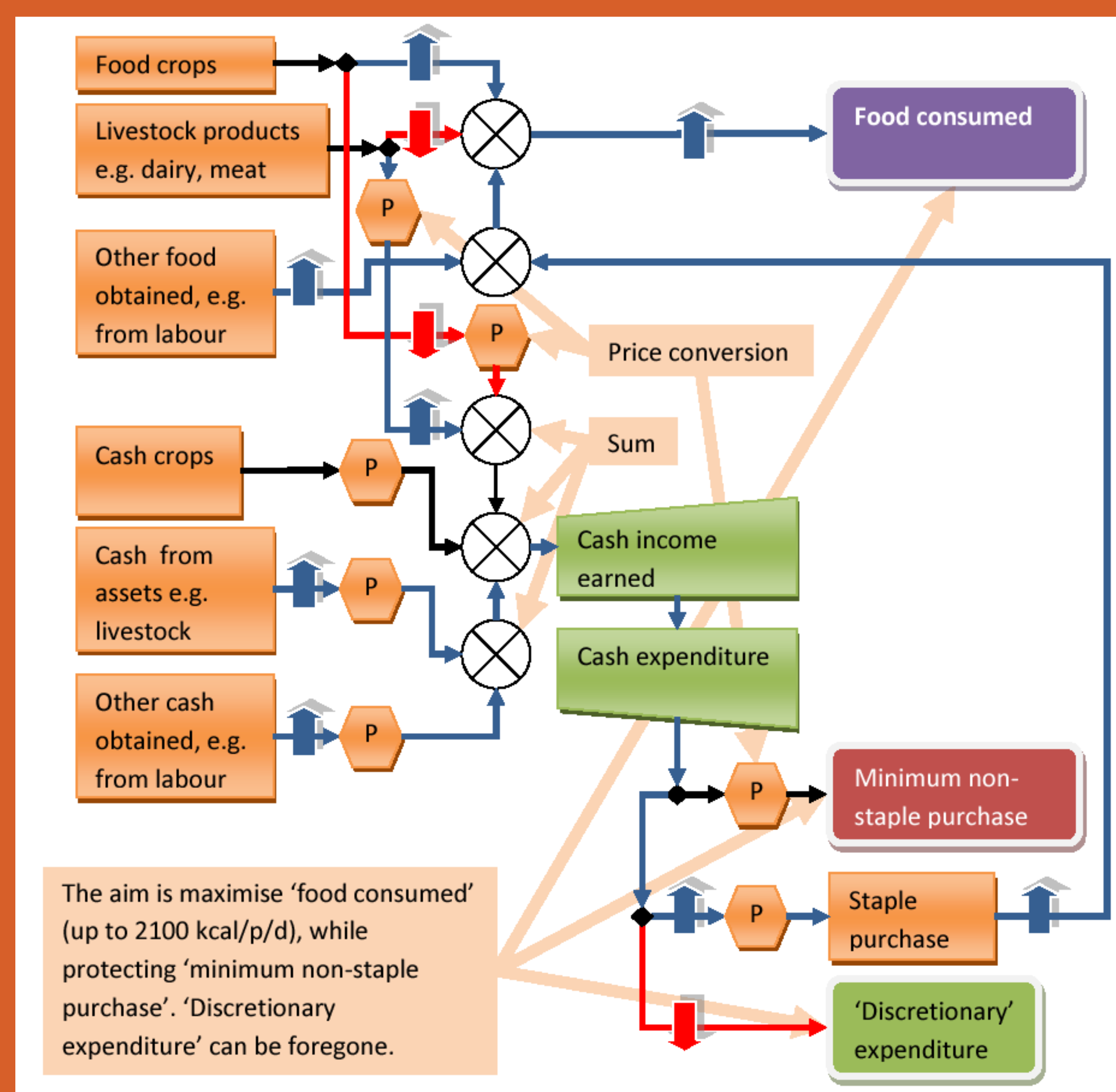


Modelling Seasonality in the Household Economy Approach and for Individual Households

SEASONALITY MODELLING IN THE HOUSEHOLD ECONOMY APPROACH

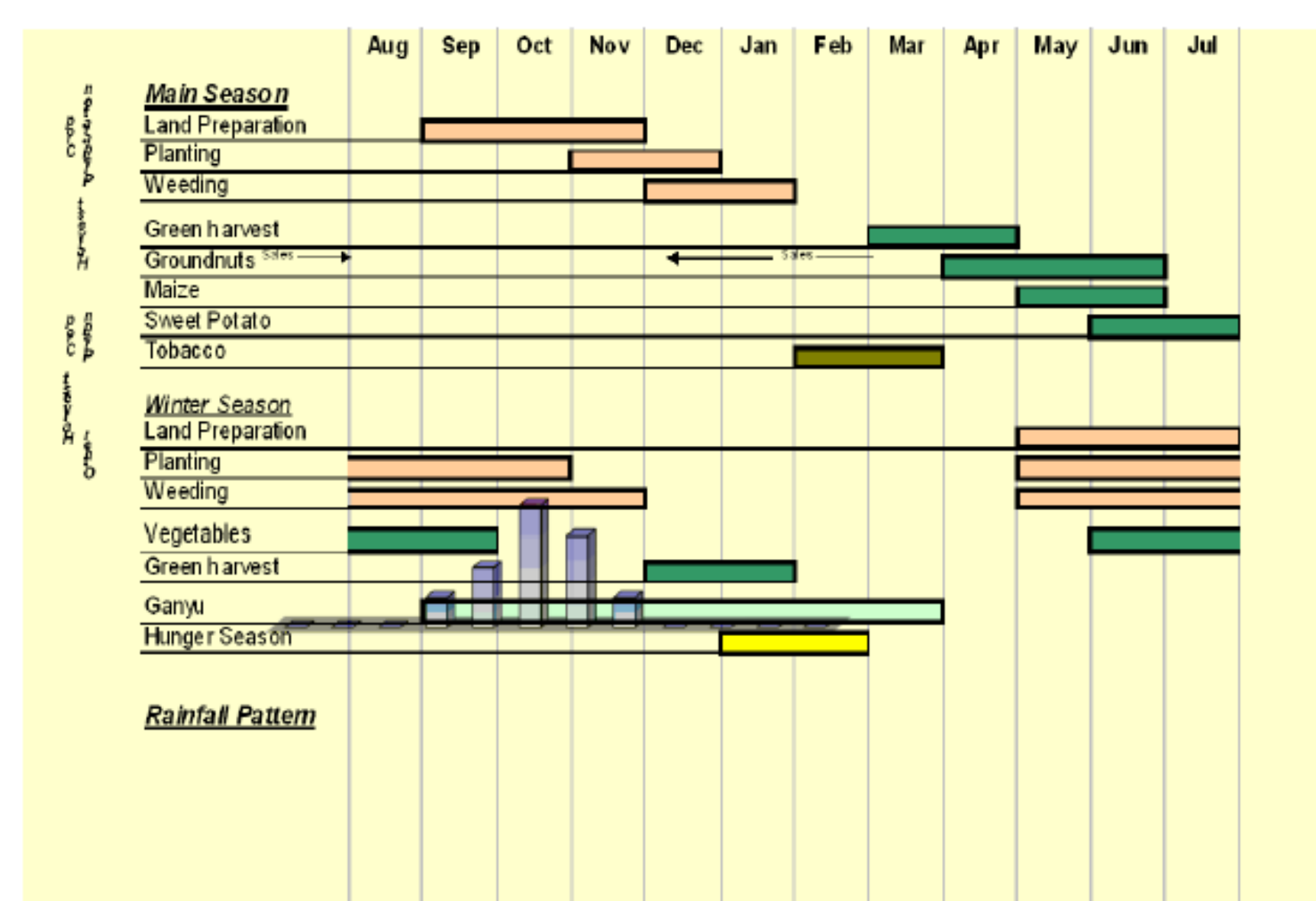
The HEA model usually begins with the definition of a 'livelihood zone', a geographic area defined as being of similar pattern of livelihood. Within each zone, households are clustered by 'wealth groups', which are differentiated primarily on assets. Examples of assets rural households list in their breakdowns are: land, livestock, labour, household goods and tools (this includes items such as carts, bicycles and farming equipment). Household assets determine productive options; for example, land provides for crop growing and pasture, livestock can be sold, they can produce dairy and they can be slaughtered for meat, while labour can be exploited for gain directly through piece-work, petty trading or some form of self-employment (such as gathering firewood or charcoal-making). Household production is converted into consumption either directly or through economic exchange. Direct production to consumption is when the household consumes the food it produces. Exchanges for food and other essentials sometimes takes place as direct barter but more usually it is done by selling production and purchasing the desired requirement.

The HEA Model for a Consumption Year



Household Economy Approach practitioners already collect information on seasonality

Figure 2 - Example of a Seasonal Calendar from Malawi



Practitioners collect this information on activities by drafting a **seasonal calendar**, an example of which is produced in Figure 2. Without the seasonal calendar, the rigour of the baseline study would be in question, so further analysis would be compromised.

Extending the HEA Model

Figure 3 - Seasonality of Budgeted Food Sources

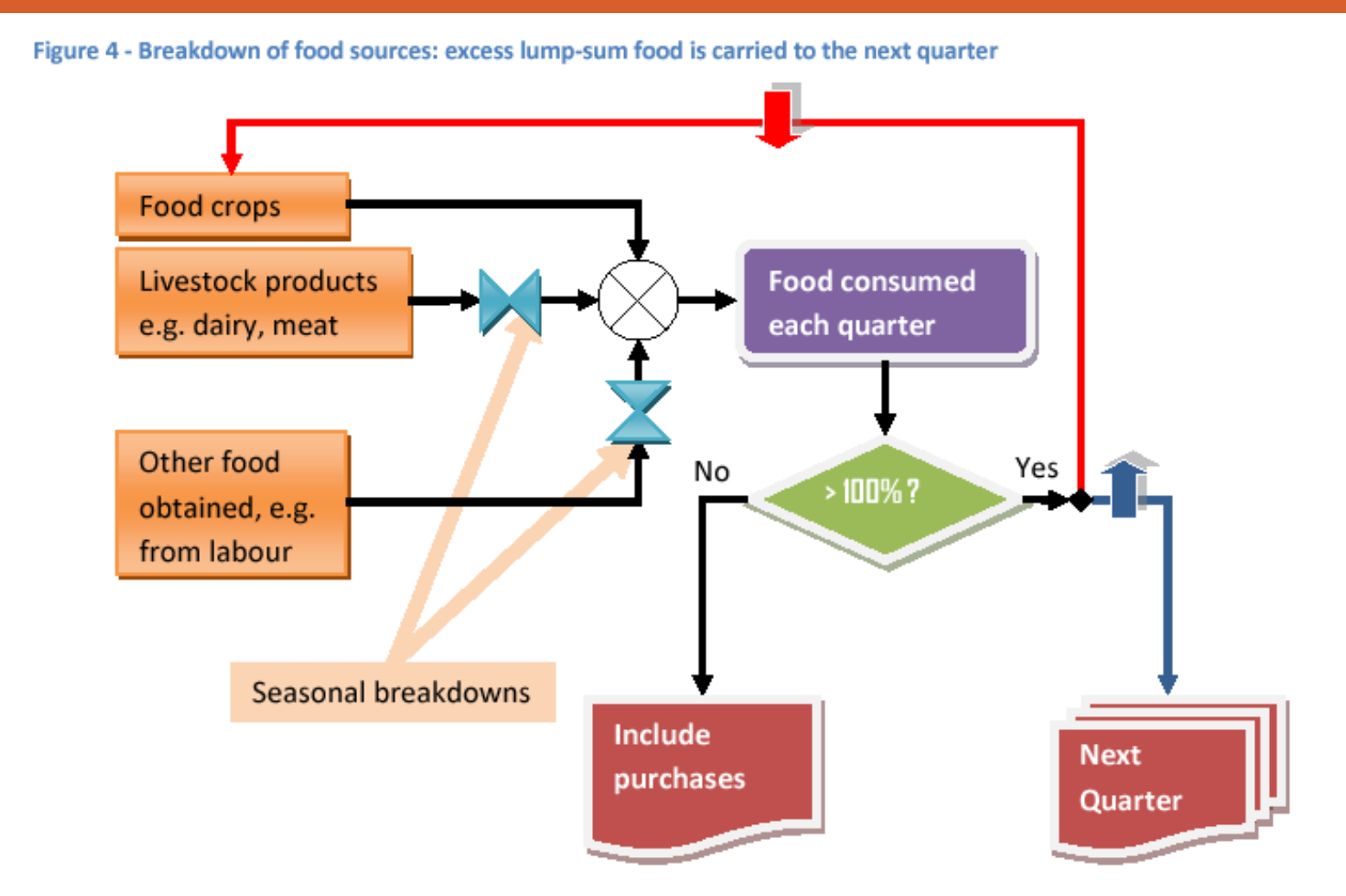
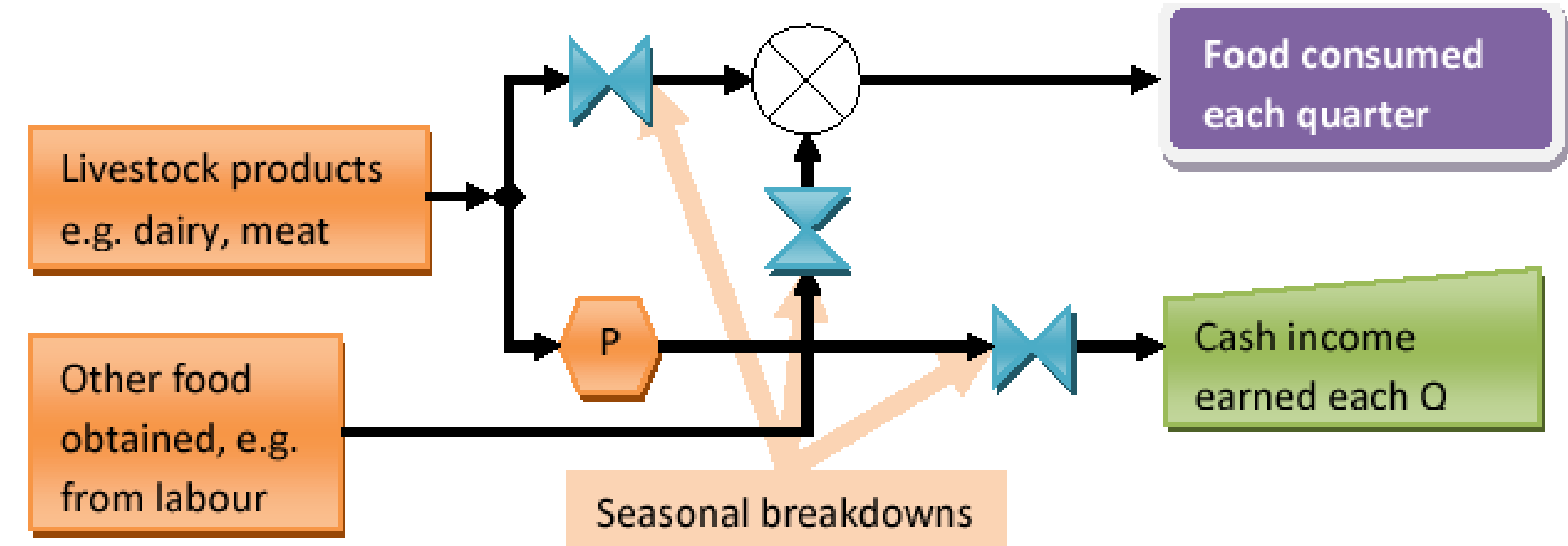
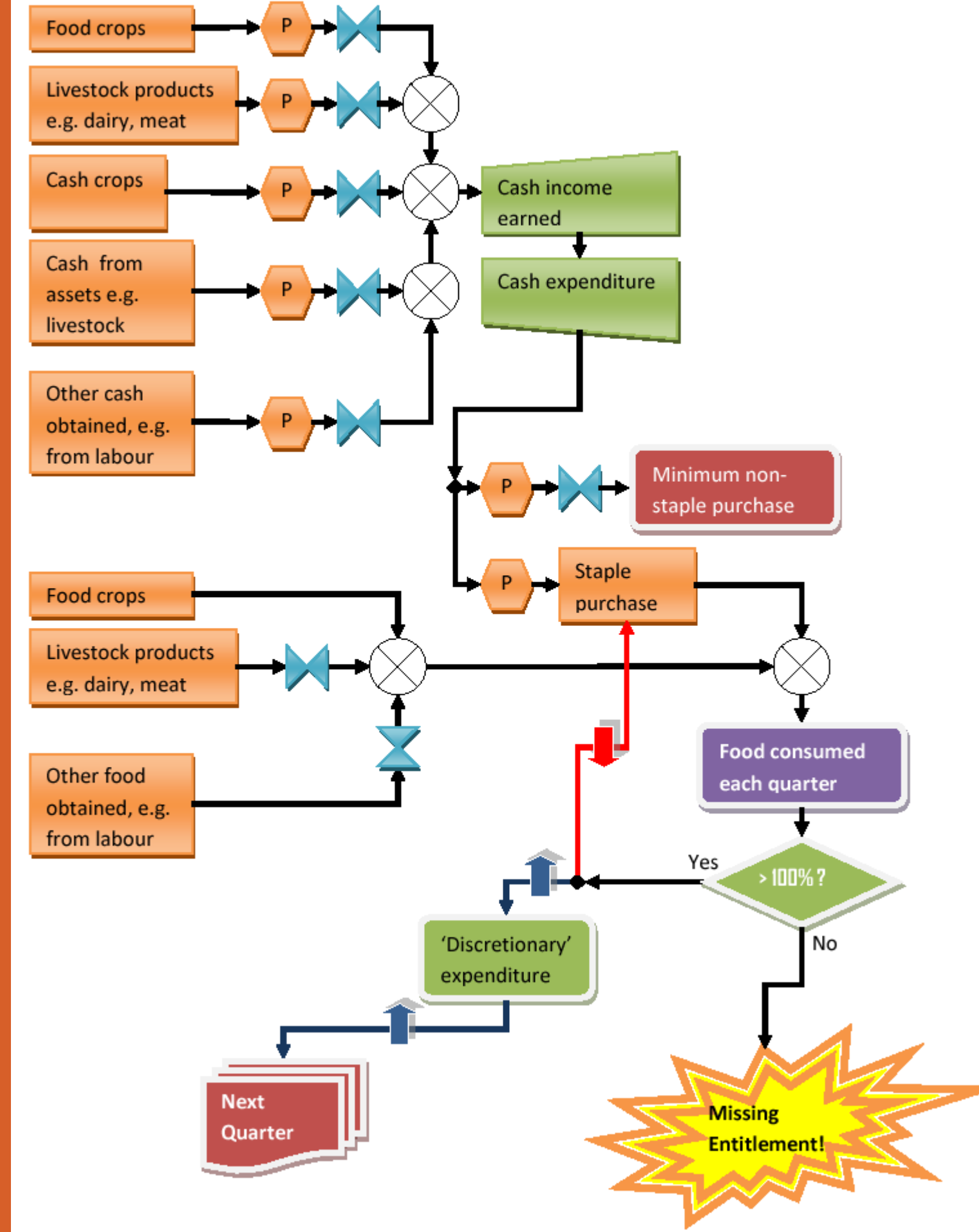


Figure 5 - The whole system with seasonality included



Some Interesting Outcomes

Figure 6 - No crop losses, just price changes (source of data for model: Malawi Vulnerability Assessment Committee, 2003)

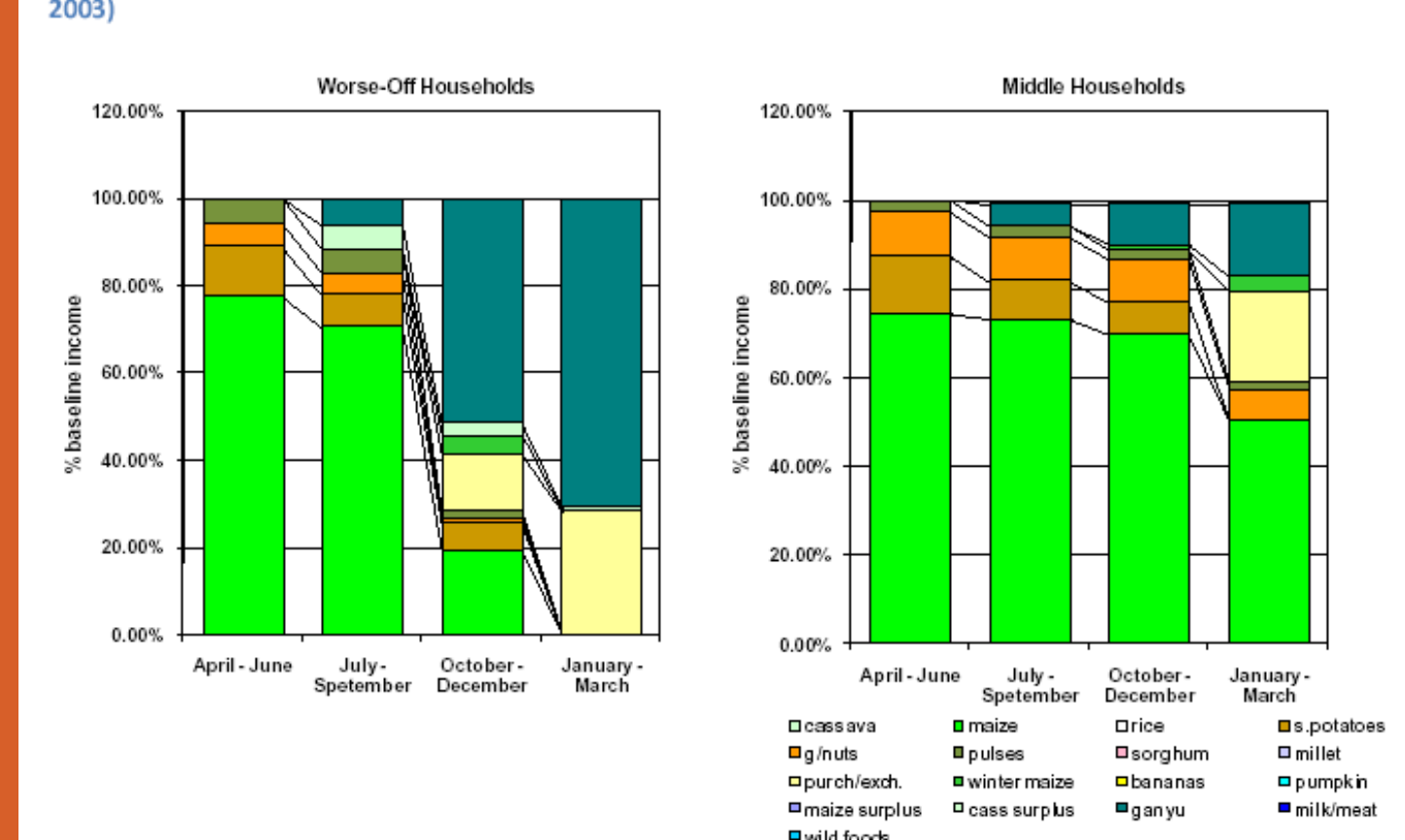


Figure 7 - Mild failure: lose 13% tobacco and 25% main food crops (source of data for model: Malawi Vulnerability Assessment Committee, 2003)

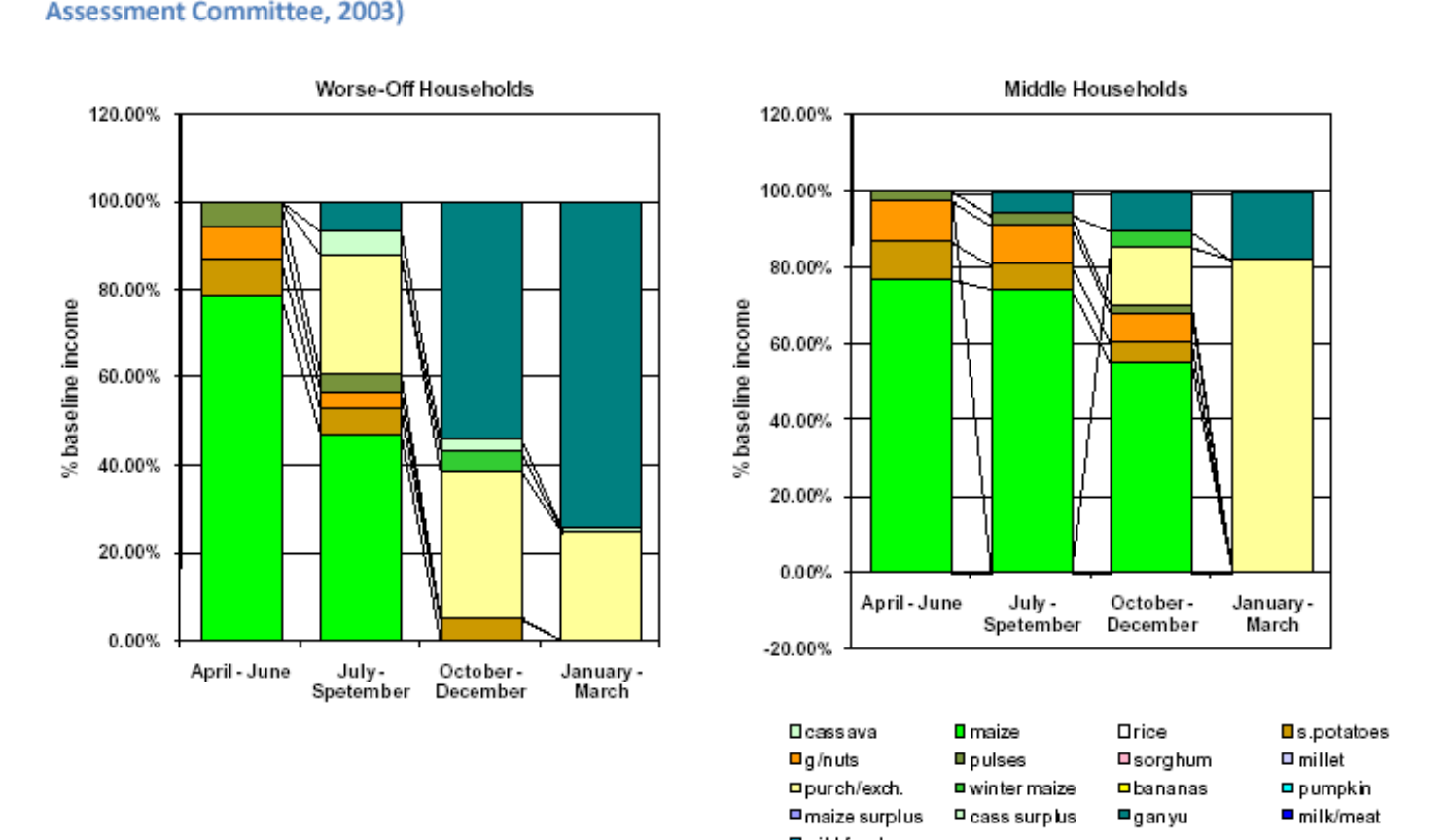


Figure 8 - Significant failure: lose 17% tobacco and 33% main food crops (source of data for model: Malawi Vulnerability Assessment Committee, 2003)

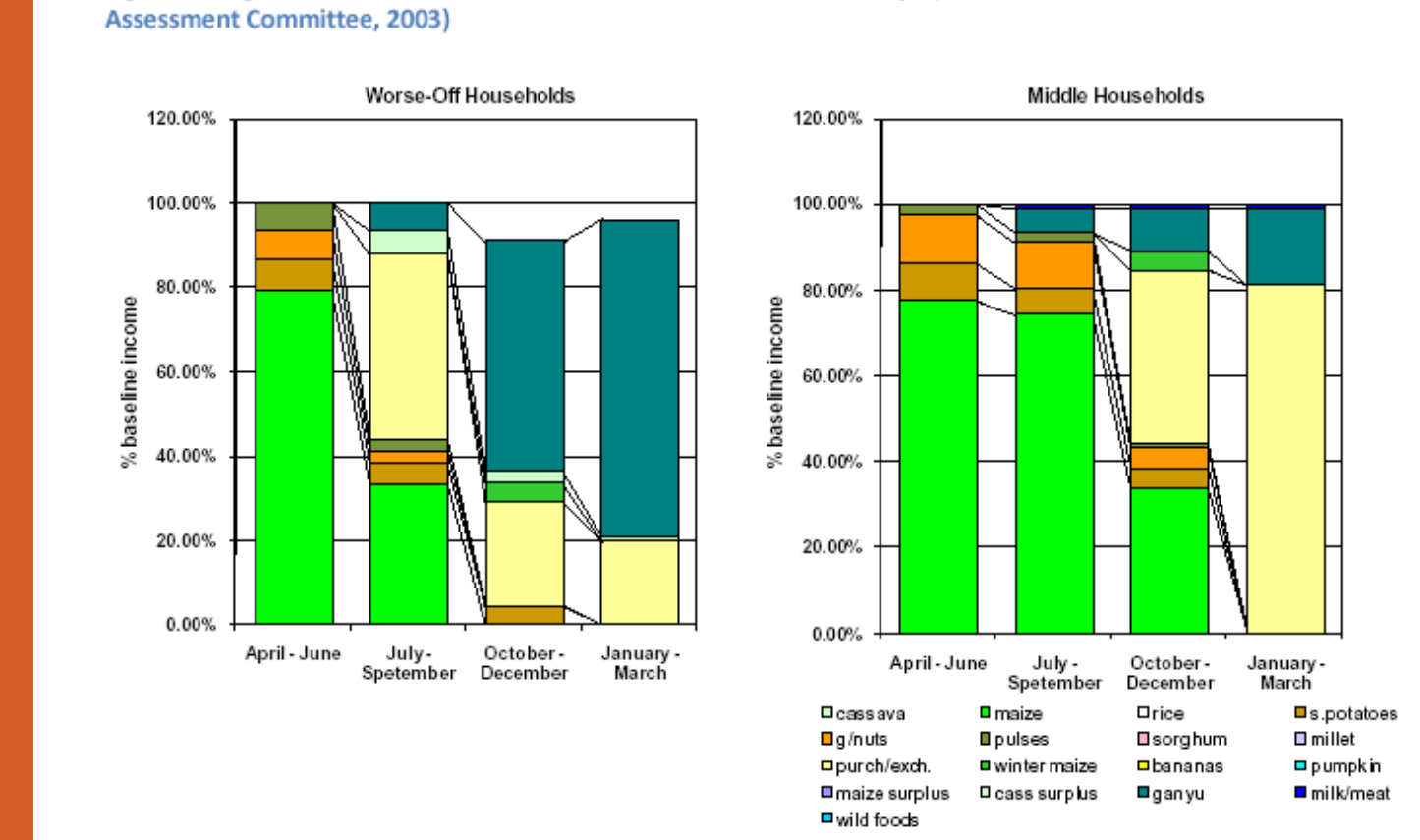


Figure 9 - Heavy failure: lose 20% tobacco and 40% main food crops

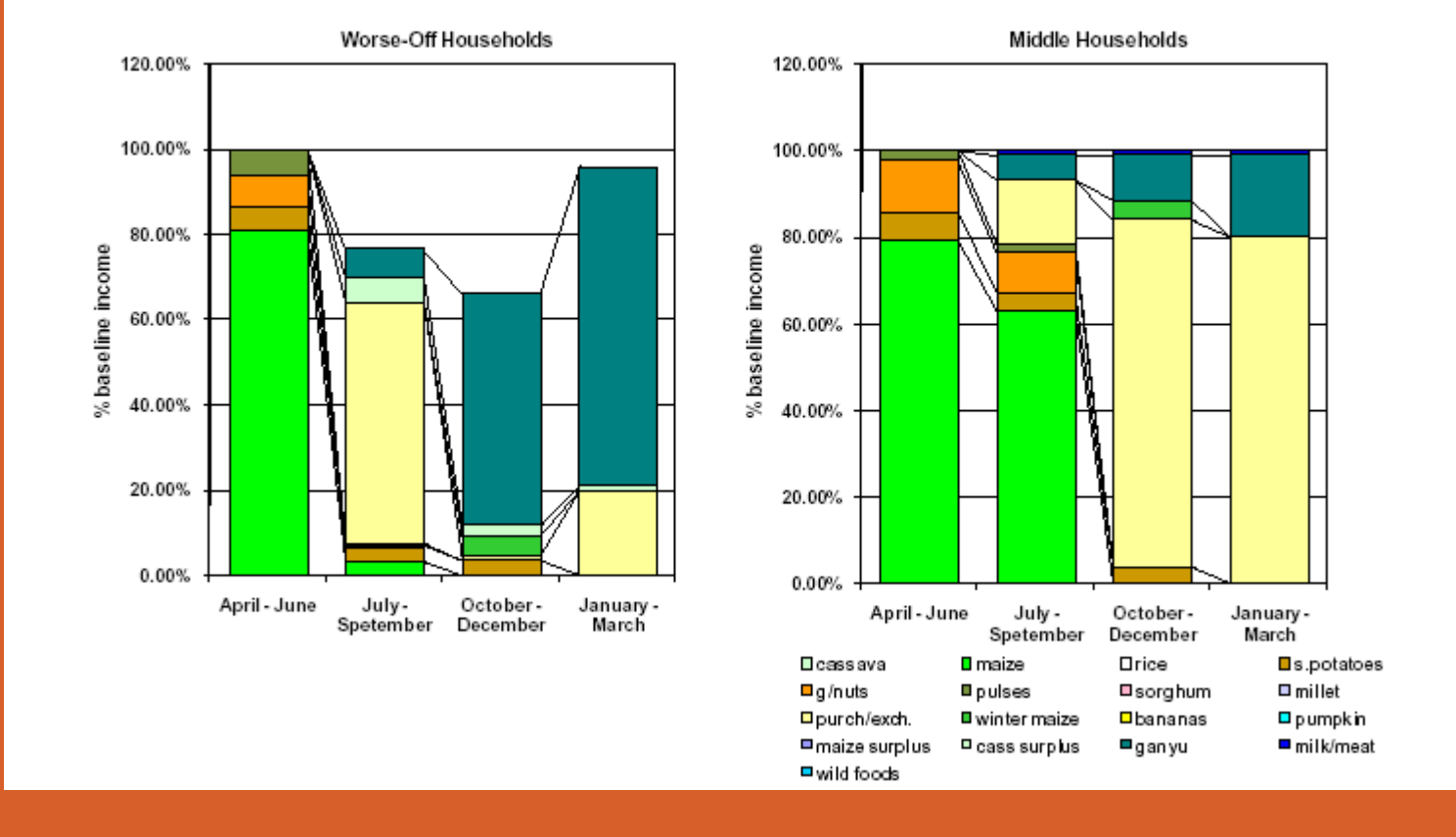
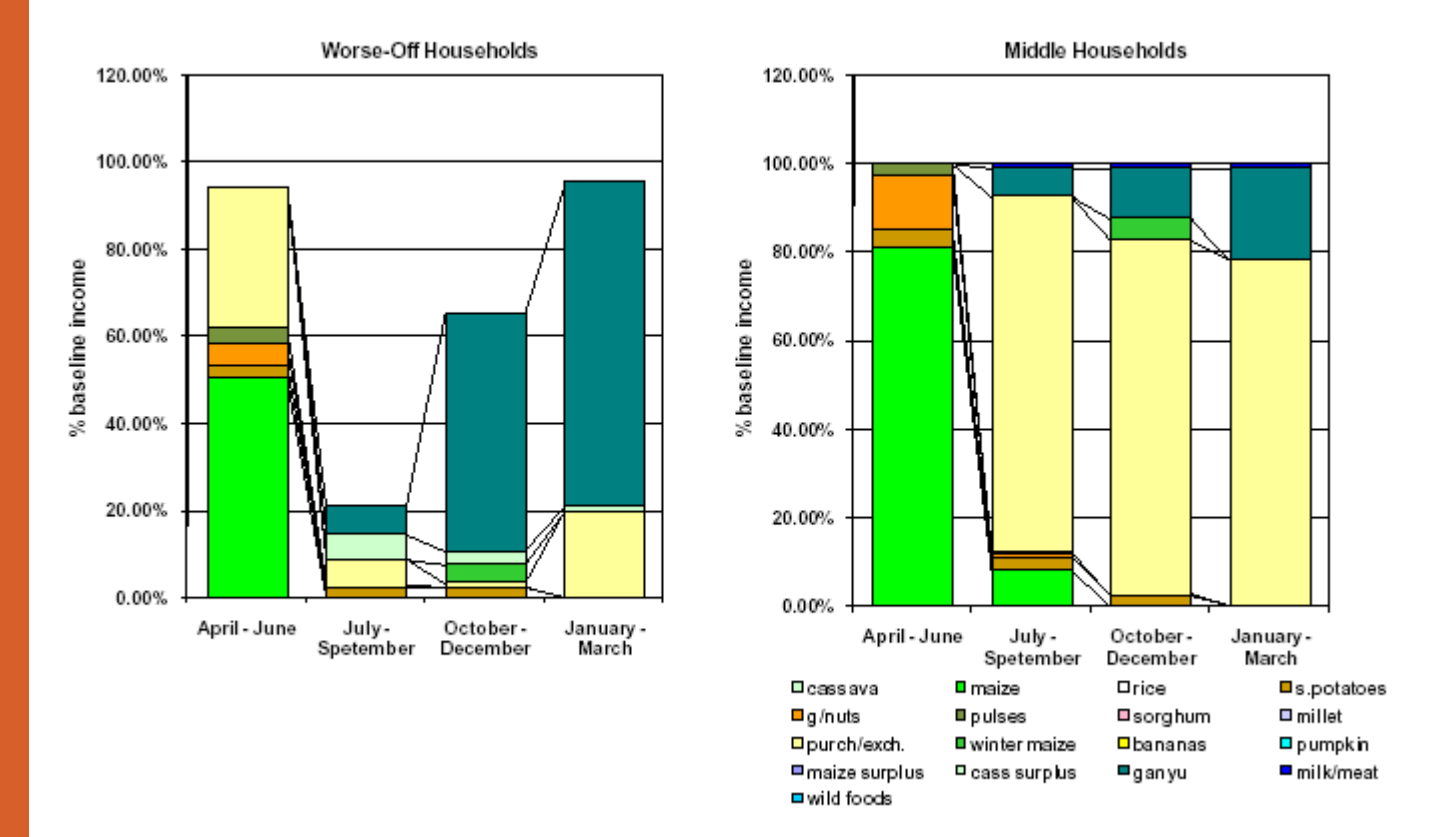


Figure 10 - Extreme failure: lose 40% tobacco and 70% of main food crops



Conclusion

This limited analysis does not allow firm conclusions to be drawn. However, the analysis does suggest that in the survey village seasonal consumption deficits result from the difficulties facing households with irregular income in smoothing consumption over the year. In general, this is likely to occur due to the problems of rationing consumption under conditions of extreme poverty, although in particular households a deficit might arise for the many reasons households are unable to manage their resources. The results for the very poorest households, which appear to be able to limit the duration and depth of seasonal consumption deficits to – at least in the short run – potentially survivable levels, suggest that this can happen to extraordinary degree, but this remains to be investigated.