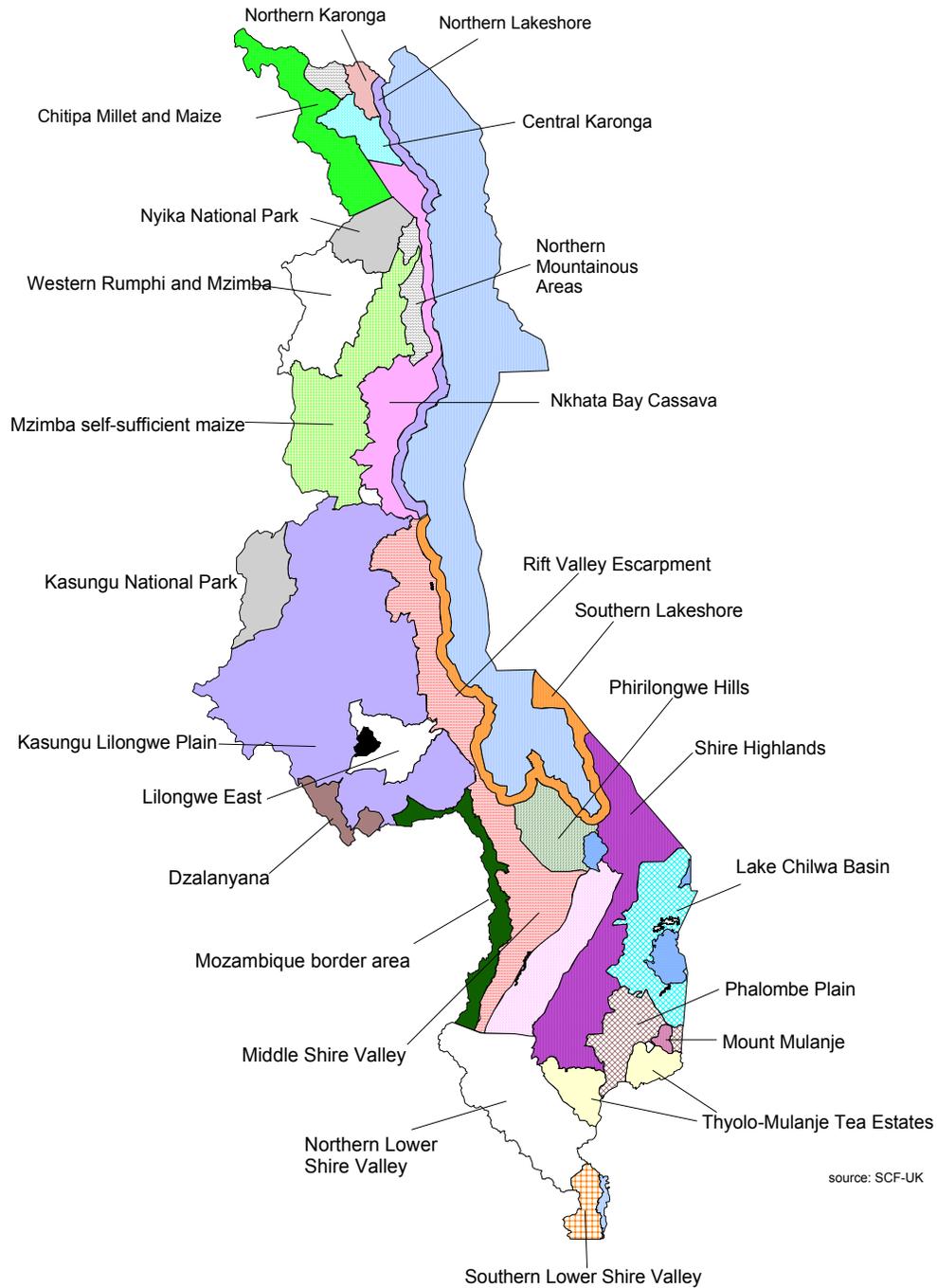


## Malawi Food Economy Zones



### Malawi FEZ map explanations

*Malawi means "flames of fire". It is said to be in reference to Lake Malawi with the sun shining on its shimmering waters when it was seen by the Maravi people in the 1300s (ref.). Today, Lake Malawi, as one of Malawi's outstanding geographic features, continues to make a dramatic impact on the viewer. It is also very*

*important to the food security of many of the peoples living adjacent to it as a source of food, fresh water and communication. Lake Malawi lies within the Rift Valley which influences much of the geography in the country. Lake Malawi is 570 km long and dominates most of the country's eastern border (see note). It flows into the Shire River which runs along the floor of the Rift Valley ultimately joining the Zambezi River journeying beyond to the coast. As a result of the Rift, Malawi's countryside is dominated by many beautiful highlands and mountains. Some of the more prominent among these are the Nyika Plateau in the North and Mount Mulanje in the South which rises to a height of 2,003 metres. In addition to the highlands, the Shire River is also associated with the Rift Valley. The Shire River flows through the southern part of the country supporting a variety of food crop and commercial production in its valley. The varied topography and climate of Malawi hosts a variety of agricultural production ranging from millet and sorghum in drier areas to maize in the more temperate zones as well as tea, coffee, tobacco, and sugar in various regions of the country.*

### **Northern Karonga**

The Northern Karonga zone is found in the northeast-most corner of Malawi and is a relatively small zone. A considerable amount of rice is produced in the watershed and wetlands of the Songwe River Valley. Food crop production is the most significant feature of this zone. Rice and maize are grown in the dambos. Maize is cultivated in dambo areas near rivers and wetlands during the dry season from July - November. Rice would be cultivated in the same areas but during the rainy season. Purchase is the second greatest source of food for modal families in this zone. The most important source of cash in this zone is cash crop sales which include rice, cassava, millet, sugar, bananas, maize and others (see Sources of cash). The primary source of income for the poor, however, is employment. Despite the fact that rich households produce surplus grain, rice is sold to Tanzanian traders just north of the border rather than within the country - this is due to the poor infrastructure of Northern Malawi. Northern Karonga is part of the Karonga ADD, one of the most prosperous. Poor households, however, have food deficits during normal years. The zone contains both plains and highlands, but the majority of the population is concentrated on the more productive plains.

### **Southern Lower Shire Valley**

This is a cereal deficit zone where millet and sorghum predominate as food crops. Livestock holdings are relatively high. Livestock sales and trade account for the bulk of income for modal and rich households. Ganyu labour is the most significant source of income for the poor. The average population density for the zone is 175.28 persons/ha (1987 census figures). While this area hosted large numbers of Mozambican refugees in previous years (30% of all Mozambican refugees in Malawi were in Nsange District), these persons have now returned home since peace was restored in 1993. The departure of the refugees and the relief programs associated with their presence means that an active trade in relief rations is no longer a factor in this food economy.

### **Central Karonga**

The Central Karonga Maize and Livestock Food Economy Zone is found in north-eastern Malawi. It is a relatively fertile area with good maize production and significant livestock holdings. Poor, modal and rich households all gain over 75% of their annual food needs from their own crop production. The primary crops in this area are maize, sorghum, millet, cassava, rice and sweet potatoes. The small amount of food which is not produced by households in the zone is purchased. Modal and wealthy households gain the majority of their income through livestock sales, while poor households have more diversified strategies which include cash crop sales, handicraft sales and labour. Livestock sales and small business make up very small percentages of poor households' income.

### **Chitipa Millet and Maize**

Although maize is the primary food crop in the Chitipa zone, a considerable amount of millet is grown here relative to the rest of Malawi (Nsanje and Chikwawa in the south are the other two high-millet producing areas.). The primary food crops grown in this area in order of importance are: 1. maize, 2. millet, 3. cassava, 4. beans, 5. ground nuts, and small amounts of sweet potatoes. Cash crops cultivated here include: 1. tobacco, 2. maize, 3. millet, 4. beans and 5. Cotton. As is the case in general in the Northern Region of Malawi, Chitipa is less densely populated than the Central and Southern Regions and there is less pressure on the land. According to a World Bank study, the Chitipa zone would fall approximately in "the middle" with regard to poverty. That is, the percentage of people living below the 20th income percentile is equal to 14 - 23% (this is much less than the Thyolo-Mulanje area, the Dedza Hills/Ntcheu area and Nkhata Bay which figure as the poorest areas in Malawi) (ref.).

### **Northern Lakeshore**

The bulk of this population lives within 5 km of the Lake Malawi Lakeshore. Despite the importance of fishing, agricultural production is the major source of food, accounting for close to two-thirds of annual food needs for the typical household. The most important food crops are cassava, rice, maize, bananas, sweet potatoes and yams. All strata of these Lakeshore communities are involved in fishing to some degree. The rich generally own canoes and nets and employ the poor to work for them. The modal group has its own equipment and fishes for itself. The poor have no equipment and work for better-off members of the community. Some male fisherfolk move up and down the coast while the women remain in their home village to farm. Other households stay in the same location year round to fish and farm. Compared to the Southern Lakeshore where there are more abundant shallow waters (thus more fish), fish catches have historically not been as high in this zone. Cash cropping is also an important source of income.

### **Nkhata Bay Cassava Zone**

Nkhata Bay is a deficit zone which has one of the highest poverty levels in the Northern Region of the country (ref.). The most important aspects of this food economy are food crops, employment and cash crops. Modal households produce crops capable of feeding the family for 8-9 months. Cassava is the major food crop, followed by maize, rice, bananas, sweet potatoes and ground nuts. As cassava is more resistant to drought than maize, this area is somewhat less vulnerable in bad years. Animal traction is limited because of rocky soils and livestock scarcity. Poor soils, as opposed to rainfall, are the limiting factor on agricultural production. Employment and remittance contribute for a third to a half of annual income for the typical household. The majority of this employment is casual labour, but there is also significant remittance and pension income. Although cash cropping is less well developed in this area, it does account for around a third of annual income for the typical household.

### **Western Rumphu and Mzimba**

The most important aspects of this food economy are food crops, wild foods, cash crops and non-food production. The typical household in this area produces enough food to feed the family for 10 months. The major food crops are: maize, millet, beans and ground nuts. Both modal and rich households have the means to practise animal traction. Wild food consumption is a small but significant source of food for both poor and modal families; proximity to Nyika National Park and the Vwaza Game Reserve may allow for above average wild food collection opportunities. Tobacco and maize are the most important cash crops whose sale comprises over half the annual income of typical households. Non-food production (beer brewing, craft and firewood sales) is extremely important for the poor and to a lesser extent the modal families.

### **Northern Mountainous Areas**

This is a geographically fragmented food economy zone which is being grouped together due to similarities in agro-climatology as well as cash cropping. The most important aspects of this food economy are: food crops, cash crops and non-food production. This is a maize deficit zone. The main food crops in this area are: maize, cassava, beans, bananas, millet and sweet potatoes. The typical household produces enough food crops to feed the family for nine months and earns half of its income from the sale of cash crops. Coffee and beans are the most important cash crops. The removal of price supports and the lower world coffee price has meant that many small hold farmers are moving out of coffee. With the exception of Khosolo in southeast Mzimba, the land is generally too hilly for the use of animal traction. Non-food production (firewood sales, beer brewing and craft) is also quite important, especially for poor and modal households. The total population of these areas is approximately 53,000 persons, with Misuku being the most populated and Mphompha the least.

### **Mzimba self-sufficient zone**

Food production and cash cropping are the most important elements of this food economy zone. Maize is the major food crop. The rich produce a significant food crop surplus in normal years while the modal families are nearly self-sufficient. Tobacco is the most prevalent cash crop which is grown by both small holders and estate owners. Livestock holdings and wild food availability are above average for Malawi.

### **Southern Lakeshore**

This is the most important fishing area in the country (due to shallower depths than the northern half of the Lake) which is and will be severely impacted by the declining productivity of Lake Malawi. The most important aspects

of this food economy zone are food crops, fishing, employment and trade. The typical household produces enough crops to satisfy 55-60% of annual food needs in a normal year (see note). The most important food crops are: maize, cassava, rice, sweet potatoes, pulses and ground nuts. Fishing involves, either directly or indirectly, all households in this zone. The typical household acquires close to a tenth of its annual food needs from fish consumption, earns over a quarter of its annual income from the sale of fish it has caught, generates another tenth of its income through casual labour for wealthier fisherfolk and earns a portion of its trading income from the buying and re-selling of fish. The Yao are the dominant ethnic group in this area and are known for their ability as traders .

### **Lilongwe East**

This area is distinguished from the surrounding Kasungu-Lilongwe Plain by its significantly lower production levels for poor and modal households as well as smaller average land holding size. The most important aspects of this food economy are food crops, casual labour and non-food production. The typical household in this area produces enough crops to feed the family for six months. The major food crops are: maize, beans, cassava, ground nuts and sweet potatoes. The use of animal traction is quite limited. Typical households earn up to half their annual income performing ganyu for wealthier farmers from Lilongwe who rent land from poorer families in this food economy zone. Non-food production often involve making mats and selling baked goods at local markets.

### **Phirilongwe Hills**

The most important aspects of this food economy zone are food crops, cash crops and employment. The typical household produces enough crops to satisfy 60-75% of annual food needs in a normal year. The most important food crops are maize, cassava and sorghum. Cash crop sales are the largest source of income for rich and modal households. The typical household earns approximately half of its income from the sale of cash crops. The major cash crops are tobacco and cotton.

### **Rift Valley Escarpment**

This is a deficit area that is somewhat rocky and less productive than the surrounding zones. The most important aspects of this food economy are food crops, cash crops and livestock. The typical household in this area produces about eight months worth of food. The major food crops are: maize, cassava, sorghum, sweet potatoes, pigeon peas and ground nuts. Only the rich have the means to practise animal traction. Cash crop sales provide the typical household in this area with 35-45% of annual income. Cotton is the most common cash crop, followed by maize and tobacco. hile livestock holdings are limited, income and food from these holdings make a modest but significant contribution to household food security.

### **Kasungu-Lilongwe Plains**

This area is well-populated and highly productive. The most important aspects of this food economy are food crops, cash crops and trade. The typical household produces crops which generally last the family 10-11 months. The primary food crop which is cultivated in the area is maize. Cash cropping is the largest source of income for the typical household and accounts for nearly three-fifths of annual income. The primary cash crop is tobacco. As compared to other food economy zones within Malawi, the RiskMap data indicate that poorer households garner a greater percentage of cash income from the sale of cash crops. Trading activities contribute for a fifth of income for the typical household in this area. A 1996 Vulnerability Assessment and Mapping draft document and a 1995 World Bank study found that small holders in areas corresponding to the Kasungu-Lilongwe Plain are among the most well off in Malawi (ref.).

### **Middle Shire Valley**

This is a wide, low-lying valley floor lying in a rain shadow with poor soils and a relatively sparse population. Many current inhabitants moved from the crowded highlands to the east from the 1930s onward (ref.). This is primarily a maize producing zone which is typically in deficit. Cassava and rice are also major food crops, the second being primarily grown on dambo lands along the Shire River. The principle cash crops are cotton and tobacco. Fishing is a small, but consistent source of income for the modal and poor families. While the poor are highly dependent on ganyu for cash earnings, cash crop sales and trading constitute important sources of income for the mode and rich. Livestock holdings are low compared to the rest of Malawi. The area has an approximate population of 289,000 persons.

### **Lake Chilwa Basin**

This food economy zone is dominated by the geography of the Lake Chilwa basin. The most important aspects of the food economy are food crops, fishing and cash crops. Production levels - of both agriculture and fishing - fluctuate widely from year to year in the zone. Agricultural production is relatively poor with the typical household producing enough food to feed the household for six to seven months. The major food crops are maize, rice, cassava, sorghum, sweet potatoes, pigeon peas and pulses. Most the farming is done by hand. Fishing income vacillates significantly in relation to the state of the lake with the typical household earning 35-65% of annual income from the sale of their catch. In bad years, there is significant male migration as boat and net owners, along with employees, move to other areas to fish. Cash cropping accounts for a fifth to two fifths of annual income for the typical household. The most important cash crops are: rice, cassava, tobacco and garden produce. The population density in this zone is less than in surrounding areas.

### **Mozambique Border Crescent**

This is a somewhat unique area in that much of its character is a result of it bordering on a highly productive portion of Mozambique (an area considered to be the bread basket of Mozambique). This combined with a road running along most of the border has resulted in a high level of border trade (particularly for the rich). Furthermore, Malawians frequently cross the border to do ganyu or piece work where land holdings are several times larger. On the Malawian side, only the rich are self-sufficient in grain production. The major food crops are maize, potatoes, beans, sweet potatoes and ground nuts. Many parts of the crescent are considered to be some of the poorest in Malawi. After food crops, cash crops are the second most important aspect of this food economy. The major cash crops are beans, potatoes, soybeans, groundnuts and tobacco. Livestock holdings are relatively low. All of the refugees that were in this area during the Mozambican civil war have returned home.

### **Shire Highlands**

This is a fairly large food economy zone which covers one of the most densely populated portions of the country. The area also includes two of southern Malawi's most important urban areas, Blantyre and Zomba. Modal families do not produce enough grain to feed themselves in a normal year. Modal and rich families rely on cash crop sales for the majority of their income. The most significant source of income for the poor is ganyu which provides the bulk of their food through purchase. Generally speaking, more tobacco, sunflower and pigeon peas are grown in the southwestern part of this zone. There are no crops grown on the Zomba plateau as it is mostly forest reserve. Main food crops for this area are (in order of importance): 1. maize, and 2. cassava. The two are inter-cropped together. Other food crops include: sorghum, beans, sweet potatoes, ground nuts, pigeon peas and vegetables. The most significant cash crop in the area is tobacco. Other cash crops cultivated in the Shire Highlands include: ground nuts, cassava, vegetables (beans, cabbage, tomatoes), bananas, pigeon peas, and small amounts of cotton. Land holding size is a significant constraint to agricultural production. Livestock holdings in this area are relatively low.

### **Phalombe Plain**

Although a reasonably fertile highland plain, this zone is known to be food insecure due to it lying in a rain-shadow. The most important aspects of the food economy are food crops, cash crops and trade. The typical household raises crops capable of feeding the family for 5-7 months. Maize is the main crop grown but will only do well in a season of good rainfall. Cash crop sales account for approximately 40% of the annual income of the typical household. Tobacco is the main cash crop.

### **Northern Lower Shire Valley**

The most important aspects of this food economy are food crops, employment, cash crops and livestock. The majority of families in this area are not self-sufficient in grain production. The main food crops grown in upland fields are maize and sorghum, followed by millet. The major crops grown in dimba fields are: maize, rice, tomatoes, vegetables, cowpeas and pigeon peas. Unlike the rich and the modal groups, the poor do not typically have access to dimba fields. This is significant as a quarter to half of food production for the better off groups may be coming from these dimba fields. The Sucoma Sugar Estate is a significant employer (and therefore source of income) for the middle and poor income groups in the area. The most important cash crops are (in order of importance): cotton, rice, sugar, tobacco and spices. Relatively large livestock holding are a significant feature of this zone. While livestock sales are the largest source of income for the rich, this revenue source ranks third after cash crop sales and employment for the mode. Other significant features within this area are Elephant Marsh (important for dambo lands) and Lengwe National Park.

### **Thyolo/Mulanje Tea Estates**

This food economy zone is characterized by its extensive tea plantations (with some coffee and macadamia nut plantations). Within the Thyolo District, 45% of arable land is said to be under tea cultivation. Despite the 8.5 months long growing season, this area is among the poorest in the country. Small hold farmers' plots are quite small in size, estimated to be less than 0.4 ha/household. The area is also well known for its high population density, 243.58 persons/ha. Modal, poor and rich households all produce insufficient food crops annually thus purchased food is very important in this zone. Small-hold farms found in the Thyolo-Mulanje Tea Estate food economy zone not under tea cultivation include the following primary crops: maize, cassava, bananas, millet, pigeon peas and sweet potatoes. Some fruit trees grow in the area such as pear and mango. In addition to tea estate employment, many small hold farmers earn cash through ganyu employment both of which are extremely important as sources of income in order to purchase food. The amount of cash garnered through employment diminishes with ascending economic status although it is significant among all three income groups. The World Bank Poverty Mapping exercise indicates that this area is among the poorest in Malawi. The feminization of poverty as a phenomenon in the zone is clear. A fairly substantial number of households in the area are female-headed. Exact figures for this food economy zone are not yet available. However, the World Bank estimates that 32% of all households in the Southern Region are female-headed, while 59% of all households found in the lowest 20% of income, are female-headed in the same region. Project HOPE, which works exclusively with tea estate workers in the area, estimates that 15% of tea pluckers are female heads of household. A third source indicates that between 46.4% - 54.7% of tea estate worker households are female-headed.

*Source: Save the Children - UK*