

The meaning of development: the example of Mafia Island
Lecture given by Professor Pat Caplan, Goldsmiths College, University of London
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For CHAMAMA (Changio cha Maendeleo ya Mafia)

Introduction

It is a great honour to be asked to address such a distinguished gathering of Mafia people and I thank you in advance for coming to listen to me tonight. I feel very diffident about speaking to you on the subject of Mafia's development since I am not a Tanzanian. However, many people in Mafia have been kind enough to call me '*mwenyeji*', and to treat me as an honorary Mafian, and for my part, I do feel that Mafia is my second home, which contains my adopted mothers and fathers, brothers and sisters and children, and now grandchildren. In the 28 years I have been coming to Mafia, since I first arrived in 1965, I have learned many things, and people here have been glad to teach me. But there are still many things I do not know, so you will forgive any shortcomings in what I have to say tonight. Also my experience had been mainly in the north of the island - I have spent much less time in the south.

What is the meaning of development?

I do not think that we can measure development by the number of big hotels, by how many bottles of Coca Cola and Pepsi-Cola are consumed, or how many cars are owned by rich people. Development, real progress, means the following:

- Health and well being of all
- Education for all
- Fair rewards for labour
- Improvement not only of the standard of living but the quality of life.

How do we achieve development?

- we need to take account of local conditions, we cannot assume that what is right in one place will work somewhere else
- we need to respect and use local knowledge - people who live in an area are the real experts on that place.

- we need to listen to what local people say and what they think their needs are.

In short, development begins from below, it cannot be imposed from above. That is not to say that we cannot use outside help, expertise, technology. Of course we can. But we must not adopt it blindly, we must think carefully about what will work, what is right in this place, at this time, for these people.

Who is development for?

In some countries of the south of the Third World, development is said to be taking place. There you can see big buildings in the cities - banks, factories, hotels. (India would be a good example here.) Yet the people in the countryside mostly remain poor. The ones who grow the food do not have enough to eat themselves. That is not real development, it is development for some and not for others.

Since independence Tanzania has tried to avoid such mistakes, and I hope that it will continue to try and do so. Otherwise it will end up as a country of two nations - a small number of rich people and a large number of poor people.

One of the most important things to note about Tanzania is that since independence, it has enjoyed peace and stability which is rare in Africa today. There is no religious conflict, there is no tribalism, there has been no civil war, or war with neighbours. When we look at the rest of Africa we can see that this is a great blessing: Somalia, Angola, Mozambique, Liberia, Sudan, Burundi and now the terrible events in Rwanda should make us all aware that peace is a great blessing.

4. Development: Improvements over last 30 years

Each time that I come to Mafia, people ask me what changes I see and what developments, if any, have taken place. Many say "there has been no development since independence". That is not true. I want to begin on a positive note, so let me first of all say what improvements I have noticed between the 1960s and the 1990s:

a) Education:

When I came in 1965, there were very few primary schools on the island, and they usually had only 4 standards. The very few children who went on to standards 5 and beyond had to go to the mainland. Furthermore, not all children went to school, and of those who did, it

was mostly the boys.

Over the next decade, there was a big improvement; by the time of my next visit in 1976 virtually all children were in school, including girls. There were more primary schools, and some had expanded beyond standard 4. (In Kanga village , for example, there was by this time a 6 standard school for Kanga and Bweni). But even by 1985, when I returned for the third time, hardly any children were getting to secondary school, and again, for those who passed, there was the necessity to leave the island. On this fourth visit, I am very happy to find not only more primary schools (for example, Kanga and Bweni now each have their own school), but also Mafia's very first secondary school, and I want to congratulate all those whose hard work made this possible.

b) Health

At the time of my first visit in 1965, there were a few village dispensaries and a small hospital in Kilindoni. The village dispensers had only minimal training. By 1976, midwives had begun to be sent to the villages, and by 1985, MCH clinics had been set up along Rural Medical centres. Today, the number of rural medical centres has increased - Bweni, for example, will soon open its own, instead of Bweni people having to come 5 miles to Kanga for treatment. Furthermore, the staff are better trained: in Kanga today, the paramedic even knows dental extraction. There are also more staff: Kanga centre now has 4 people: paramedic, nurse, midwife and a *mama afya*.

Virtually all children now get immunized against tuberculosis, polio, measles, diphtheria, whooping cough and tetanus. The growth of children is monitored with cards. pregnant women get immunised and receive iron and folic acid tablets. They can have their babies in the health centres and receive skilled help. All of these are important improvements in the health of everyone, including small children and pregnant women.

c) Water:

When I came in 1965, Mafia was in the middle of one of its periodic droughts. In Kanga village, water was very scarce - people often had to go long distances for water. I can even remember carrying water from Kirongwe by Land Rover on one occasion. The wells were in a poor state - unlined and not deep enough. Since that time, the water supply has improved, with better wells. This is very important for two reasons: clean water is vital to health and

the availability of a nearby water supply helps lessen women's work load.

The limitations of these developments

No one will want to claim that the situation with regard to education and health is now perfect; the schools are often under-equipped, they may not have enough teachers, books desks or other facilities. Furthermore, although having a secondary school on the island is very good, it is expensive for parents to send their children there, especially if they are living far away and the children have to rent accommodation, pay for their food etc. So not all children who pass the entrance examination will succeed in going to the secondary school.

As far a health is concerned, there are problems in the implementation of the programme: the drug supply is insufficient, the immunization programme sometimes has to stop because of lack of vaccines, or kerosene for the fridge in which it is necessary to keep them. Not everyone is near to a Rural Medical Centre, and people sometimes have to walk long distances to get there. Staff have to leave their work each month in order to go and collect their wages from the District Capital.

Some of these factors are difficult to control locally: the supply of drugs depends for example on what is sent by the government, so does the supply of teachers, school books and equipment. But as has been shown by he opening of the secondary school, citizens can make the government at various levels aware of their needs by pressing for them, and also seek ways in which problems can be solved, perhaps by raising some of the cost themselves.

Problems of development in Mafia and beyond

In other respects, however, it is true that there has been little development on Mafia. indeed in many ways people are poorer now than they were in the 1960s. Why is this the case? In order to understand this situation, we need to look at different levels:

- the world economy
- the national economy
- the district and region
- the village
- the household

I will look at each of these in turn, but it must be clearly understood that they are inter-related

very closely - what happens at one level affects the others.

a) The world economy:

Tanzania, even Mafia Island, is part of the world economy. Tanzania imports goods from abroad and exports goods such as tea, coffee, sisal, coconut oil and so on. But the world economy at the moment is in recession. Even in the developed countries, the economies are in poor shape and there is very high unemployment.

Nonetheless, the way in which the world economy is organised means that the powerful developed nations, such as the USA, the European countries and Japan, can set the terms of trade with the developing countries of the Asia, Latin America and Africa. This means two things: they can set the prices which they will pay for commodities which Tanzania exports and they also set prices for their own goods. Over the last 20 or so years, the price of goods which Tanzania imports - oil, spare parts, machinery - has been increasing, while the price which Tanzania receives for its exports has been declining. In other words, even to purchase one tractor in the 1990s, Tanzania may need to export twice or three times as much coffee or tea as it did in the 1980s. Furthermore, the developed countries of the North may set tariff barriers on goods coming from the South, which makes exporting even more difficult.

b) The Tanzanian economy

As a result of these and other factors, Tanzania has been forced into a situation where it has had to borrow large amounts of money, especially from the International Monetary Fund. Such money has to be repaid, and it also carries interest. Tanzania is not alone in this: most sub-Saharan African countries now have heavy debts and are paying each year more in interest payments than they are receiving in either loans or aid. Such a heavy load of debt seriously blocks development.

Furthermore Tanzania has had conditions imposed upon its loan by the IMF:

- devaluation of currency (making imports more expensive)
- wage freeze (in spite of inflation) lowering the standard of living for workers.
- abolition of price controls (which has meant prices have risen a great deal)

- increase in interest rates (making local loans more expensive)
- removal of import controls (allowing more goods to be brought in from outside)
- cuts in government expenditure (which means less money for social services such as health and education)

c) The District Economy

What has been the effect of this at the District level, that is, for the Island of Mafia?

- more goods are available now, but they are very expensive- wages, for those who have paid jobs, have not increased in line with inflation.
- food prices have gone up a lot
- health and education budgets have neither kept pace with increasing population nor with local needs, indeed, in real terms they have been cut.
- people are having to pay fees to send their children to school, and soon they will be asked to pay for medical services and drugs.

The majority of people on Mafia are small farmers and they depend upon two things: their own subsistence cultivation to grow rice, cassava, sweet potatoes etc. - and cash crops particularly coconuts and, in the south, cashewnuts.

If the price paid to producers of cash crops increases in line with inflation then they will not find price increases of goods they need to purchase so difficult. But the reality, at least as far as coconuts is concerned, is that prices have not only failed to increase, they have actually halved in the Dar es Salaam markets since last year. Currently, those exporting coconuts from the island to Dar, by the time they have paid their transport expenses, barely cover their costs; they do not get any profit.

But there are other local factors which inhibit the development of the economy on Mafia. Some of these at the village and household level I will discuss in a moment but let us first look at the District as a whole.

i) infrastructure

The infrastructure is very poor - there are only two main roads, and both of these are in an appalling condition. As a result, transport is a major problem, vehicles quickly deteriorate, passengers are left stranded. Furthermore, transport to the mainland is not easy. People travel by *mashua*, which is not only risky, but uncomfortable and dependent upon tides and

winds.

The plane service is too expensive for most people and is often delayed or cancelled. In any case, there are rarely enough seats for all those who want to go. I am told that there was a steamer service running for some time but that this is no longer the case.

So Mafia is in many ways cut off from the mainland, and the difficulties faced by other parts of Tanzania are exacerbated by the fact of Mafia being an island. Communication with the rest of Tanzania is difficult, and slow. Even within the island, the main means of transport is by walking. Vehicles frequently break down and getting spares is difficult, slow and expensive. Government officials and workers find it difficult to travel round the island and keep in touch with people.

ii) Power

There is no form of power supply - except in Kilindoni and Utende. The main source of power is human labour, about which I will talk more in a moment. Even machinery which is operated without engines - bicycles for example - are in short supply and too expensive for most, and machinery to assist in cultivation is rarely available, whether this be complex machinery such as tractors, or simple machinery such as wheelbarrows, carts, handbills.

iii) Technology

The level of technology for cultivation is very low, with the main tools being the small handhoe (*jembe*) and the *mundu* and the *panga*. Most agriculture is thus very labour-intensive, that is, it requires hours of backbreaking work for quite small returns. Little use is made of fertiliser or irrigation, and there is a heavy dependence upon rainfall. Since records began to be kept earlier this century Mafia has not been self-sufficient in food.

iv) Markets

The market for the main cash crops is far away: people have to export their nuts to DSM, which is done on a more or less individual basis.

Adaptation and survival techniques on Mafia

Yet people manage somehow to survive. They are prepared to walk long distances, whether to see their relatives, attend ceremonies (*mashughuli*), go to court, to government offices, to

the District hospital and so on. They use *ngalawa*, *mashua* and *majahazi* to get to the mainland. Some villages have collectively purchased vehicles, even tractors. Many people work hard, using their own strength, to grow both food and cash crops. Indeed, as I shall go on to discuss in a moment, some of them work far too hard.

People look for new opportunities to make an income: for example in the northern villages, some of the young men are now fishing for lobster which is exported to Dar and beyond, and which fetches a better price than fish. So people are not unwilling to adapt, they do not lack initiative, they do look for new opportunities although few of these present themselves.

When we look at how we can develop, it is easy to dream dreams. We could draw up a list and say, if we get these things, they will make us happy, they will mean development on Mafia:

- new roads
- more vehicles to transport people and goods around
- electricity in all villages
- telephones and postal services throughout the island.

Yet we all know these things are not all going to happen tomorrow, or even the day after. Many of them require large amounts of money which neither the District Council nor the government have available. So we have to think about how we can use what we have got to make small but significant changes and improvements in people's lives here on this island. We have land, we have sea. We have subsistence food crops, we have cash crops. Towards the end of my speech, I shall be outlining some of the ways in which possibly we might think about using these resources more.

We have considered so far the levels of world economy, national economy, and the district. I want to say more about the district economy and its possibilities towards the end of my talk, but first let us consider the village and the household.

d) The village economy

The village is a unit for administrative purposes: schools, clinics, local government. Villagers may cooperate on particular projects: buying a lorry for example, or helping build a clinic. But villages are not isolated economic units, they are linked to the rest of the island and beyond, and villagers themselves have networks of kinship all over the island and the rest of the

coast including Zanzibar and Pemba.

Nonetheless, there are differences between villages: in the north, the villages have always been nucleated, each one surrounded by its belt of bushland. In the south, on the other hand most of the land is planted with coconuts and there is less scope for subsistence cultivation. Some villages are nearer to the sea and people engage in fishing, others are inland. Some are nearer to the administrative centre, Killindoni, others are far away, and communication without either a good transport network, postal or telephone system, is difficult. So each village has its own specific conditions.

It is primarily at the village level that any development must take place, for that is where people live. If people themselves are to be involved in development - and that is the only real and lasting form of development - then this must be at village level, with the different conditions and needs of each village being taken into account. No government official, no expert on agriculture, fishing or animal husbandry knows as much about any village as the people who live in it. So development has to use local knowledge together with new knowledge and expertise coming from outside. Development has to come from below, as well as from above. But new ideas, techniques must also be brought in and new information disseminated to villagers through meetings, seminars and courses.

e) The household economy

The household is the major unit for both production - growing food and cash crops - and reproduction - having children and bringing them up, looking after household members. In theory a household should be a mutually beneficial unit: parents cooperate to grow food and provide cash needs, care for children, who in turn care for them when they are old. All household members should share the fruits of labour. But is this what actually happens? Not always. Some members of the household do better than others. Let us look more closely at the factors involved here:

i) work loads and the sexual division of labour:

This means that men and women do different work. Men do most of the work involved in clearing bush fields in the north of the island. They cut down the bush, set fire to it when it is dried, and build fences around the fields to keep out pests such as wild pigs. Women do most of the work of planting rice, weeding it, guarding the crop and harvesting. Either men or women may grow cassava and sweet potatoes. If we look at food production in terms of hours or days of labour, we find that on average, women spend a lot more time in the fields

than do men.

Men do most of the work connected with the cultivation of coconuts, since they own more trees than do women. This is partly because of the inheritance laws, partly because men are more likely than women to plant trees themselves or pay for others to do so. They arrange for nuts to be felled and husked, and for the transportation of nuts to the coast and to DSM for sale. So men may work hard, but only for short period, while women's work is continuous.

Furthermore, because men control most of the household cash, they are the one who can decide how to spend it - whether to buy food and which kind, clothes, cigarettes and who gets what.

Men are also the ones to receive most of the cash income, since they not only own most of the coconut trees, but also engage in other income-generating activities, such as fishing, casual labour in the village, migrant labour to the city. Women have few sources of cash: they may own a few trees (but are dependent on men to market the nuts), otherwise their main source of cash income is from making the beautiful mats for which Mafia is famous. However, a woman is unlikely with all her other work to be able to make more than 6-8 mats per annum, and she sells each at 1,000/- to a local (male) trader, who in turns sells them for 2,000/- in DSM.

Islamic law states that men should take care of the cash needs of the household: food, clothes, school fees, daily items like kerosene, tea, sugar, while women perform most of the domestic labour: processing food (threshing, winnowing, pounding, cooking, going for firewood, going for water, washing vessels). Looking after children (breast feeding, bathing, cleaning). The reality is that most women are involved in the production of food for the household, and many of them are also having to find cash for household needs when the husband, if they have one, is unwilling or unable to provide sufficiently. So we often find that women's work load is as follows:

- cultivation of food crops
- domestic labour including food processing
- seeking some cash income e.g. mat making

In the studies that I have done in the last few years, the time budgets of men and women are strikingly different. Many women work all day in the fields at busy times, men rarely work a full day. Women do almost all of the domestic labour, perhaps aided by older

children or other female relatives. This can involve fetching several buckets of water each day, sometimes from distant wells, fetching firewood, pounding rice (a very tiring job as I know when I have done it), cooking in a smoky kitchen. Domestic work has to be done every single day throughout the year.

ii) fertility and its effects on production

In addition to all of these tasks, women are the ones who become pregnant and bear children, whom they breastfeed for two years. The fertility rate in Tanzania is very high: the average number of live births per woman is seven and there are many women on Mafia who have had many more pregnancies than that. Many women begin bearing after an early marriage at the age of around 17 and continue to be either pregnant or lactating for most of their reproductive lives.

What is the effect of this workload on women and on their households?

- many women have ill-health, especially anaemia
- they may well give birth to small babies, who are more vulnerable to early death.

Women who are in an advanced stage of pregnancy or have just given birth, cannot cultivate to the same extent. Thus each year that a birth falls in the peak agricultural season, the likelihood is that the household will cultivate less that year, and thus grow less food of its own. As a result it has either to purchase more food, or to eat less. In other words, levels of *production*, especially of food crops, are affected by *reproduction*. Reproduction in turn is affected by production: if women work too hard in pregnancy they may have miscarriages or small-for-dates babies who may die.

iii) The division of food in the household

This brings me to another issue, at the level of the household, and that is the way in which food is divided up, and the household's resources are shared out. In my research, I often found that when women serve up food they give more food and better food to men.

Why?

- Our husbands will be angry if they do not get nice food.
- We are afraid of the men if we do not feed them properly
- Men need more food than women - the work they do is more important

- women can withstand hunger better than men - that is how God made them.

Yet the amount of food a person needs depends on several factors:

- their weight and height
- the amount of work they do - those who work more physically should get more
- their age
- their condition - thus women who are pregnant or lactating need more food than those who are not.

Much of the food in households on Mafia is purchased - few households grow enough to feed themselves for a whole year, so they buy food in shops, such as maize meal (*unga ya dona*). Furthermore, the *kitoweo*— such as fish, occasionally chicken or meat, beans - also has to be bought. This is the main source of protein and thus its distribution is very important, especially for growing children, to enable them to build both their bodies and their brains.

One of the problems here, (and we find this problem elsewhere in the world), is that whenever the government or experts talk about 'better food' (*chakula bora*), especially for children, they say that women need to be educated. But often women are well aware of what food is needed, they just lack the power and resources to purchase it. Men, on the other hand, may well have both the power and resources, but they often lack the knowledge about the importance of good food for growing children and pregnant or lactating women.

Furthermore men may not see how much work women do - they may take it for granted that this is the way things are. Or they may devalue women's work to being of less importance than the work which they do. Thus it becomes 'invisible' work which is not rewarded either in terms of money or food.

So what can be done to improve things at the household level?

Changes needed at household level

i) Decreasing women's workloads

One way is to decrease women's work-load, especially during pregnancy or lactating. How can this be done? They could receive more help from other members of the household, including men. There is nothing wrong with a man helping in household work, what is wrong is for one human being to sit in idleness watching another wear herself out with too much

work.

Another is to share the resources of the household more equally, including food.

ii) Reduction in fertility

Another is to reduce the frequency of births, so that women have a chance to rest between bearing each child. This is important for her body to get back its strength, and it is also important that each child should have two years of breast-feeding, which confers immunities and supplies with protein. So women should not get pregnant again for at least two years after having a baby, preferably three, which would mean 3-4 year age gaps between children.

Nor should very young women or older women over 35 bear children. Young girls have not yet reached their full strength and they may bear babies with difficulty, while older women may not only already be tired from many pregnancies but also there is a greater danger of having handicapped children. If women do not start having babies until their twenties, this would also give them more chance to get educated and an educated mother means an educated family, one who can plan her life, her work, the well being of her children better. If there is a 3-4 year gap between pregnancies, and a shorter period of child-bearing, this would also decrease the overall fertility rate. For each household, there would not only be fewer mouths to feed, but also more resources for each child. Such children would be more likely to survive into adulthood because they would be better cared for.

iii) increase household food production and cash income

This will also have an effect on national and local development, for at present the national resources cannot possibly keep up with the population increase. In the three decades in which I have been working here, the three decades since independence, the population of Tanzania has more than doubled. Some will argue that Tanzania is a big country, and there is plenty of space. They argue that the main resource of the country is its people. But each child born needs the following:

- food
- immunisation
- growth monitoring

- schooling
- clothes
- job
- healthcare

This is expensive for each household, for each district, for the country as a whole.

Again, in my own research I found that often women say that they would like to space their children more, to have a rest from childbearing, but their husbands may not agree. So again this is an issue about which men have to think carefully.

Conclusion and some suggestions

Earlier in my talk I said that when we think about development we have to ask certain questions:

- What do we want?
- What resources have we got with which to achieve our goals?
- What effect will development have? Will it benefit everyone or only a few?

I also said that Mafia is not without resources:

- its people and their local knowledge and intelligence
- a well organised local administration
- land much of which is fertile
- sea

With some small changes we could see great improvements. Here are some suggestions:

i) Improve Food Production

If most people could grow enough food to feed themselves, they could spend their cash income on other things: better clothes, education, consumer goods like radios and bicycles.

How do we achieve this?

- Those who are not contributing much agricultural labour now could do so.
- Improved agricultural techniques should be taught to all farmers, including women who are responsible for most of the food production.
- Grow more vegetables and a wider variety of them. This is already beginning to happen and this is the first trip in which I have seen tomatoes

available and plentiful. Some people also grow ladies fingers. But there is scarcely any vegetable which does not grow easily on Mafia with proper care, including green leafy vegetables which are an important source of iron.

- Keep poultry which provides eggs for children.

ii) Improve Technology

Appropriate intermediate technology could improve agriculture efficiency and lessen work loads:

Hand mills could husk rice.

- Ox-carts, wheelbarrows, water carts, could be used for carrying goods and water.
- Improved tools such as sickles for harvesting instead of shells
- Improved storage so that less of the grain is lost
- Greater yields could mean that some of the crop is set aside as a reserve
- More use of millet as a crop. This used to be the staple in the north of the island, but it is hardly grown now. it is a hardy crop, and very nutritious, more so than cassava and also a better food than *unga ya dona*.

iii) Improve Animal Husbandry:

This could mean more meat and milk, more animals for ploughing and traction (eg carts), more dung for fertilizer. It might even be possible to think of generating biogas which could be used for lighting. This could be done through a revival of the 'better cattle' (*ng'ombe bora*) scheme, and more help for farmers with medicine for dipping. This should lead to greater milk yield, thus making milk available to everyone at a reasonable price.

Greater use should also be made of goats for milk and meat. Goats are hardy animals which can eat almost anything, require little care, and produce milk which is more suitable for children than cows milk.

iv) Improve Cash Crops

I am told that there are many ways in which the coconut yield could be improved here and also land on which coconuts are grown could be used more intensively. Inter-planting of coconut trees with other crops like cocoa, peppers, papaya, bananas and vegetables

would mean greater overall yields per acre.

v) Find Alternative Markets for Coconuts

At present the DSM markets are flooded with coconuts and the price has gone down. Alternative markets need to be sought. If Mafia Coconuts Ltd, now that it is under new management, takes off, it could not only process its own nuts but also buy nuts from small growers on the island, (as used to happen in the past), and process them for coconut oil, cattle feed, coir, charcoal and many other products.

vi) Investigate new sources of cash income

- seaweed farming
- poultry production (which would also improve diet)
- beekeeping (which also improves pollination of coconuts)

vii) Fishing

More intensive fishing while also preserving fish stocks. Loans for fishermen wishing to purchase capital equipment such as boats or nets. This could give both cash income and also improve protein intake.

viii) Forming cooperatives in each village for mat production.

This would help in the cost of buying dyes, which is now considerable, and also in marketing. Consideration might be given to marketing directly through an NGO such as Oxfam, which would give producers a much better price.

ix) Establishing creches in each village

Creches are needed to care for children aged between two and seven, when they go to primary school. At present, such children are either left alone for long periods during the day, or mothers have to take them to the fields. Often such children are not fed from early morning until evening. A creche would not only mean that some adults, both older people and younger unmarried people keep an eye on them, it could also ensure that they get fed, thus improving their health.

In order to achieve all or any of the above, there are however, two important capital investments which have to be made. One is to improve communications both on the island via roads, the other with the mainland via the steamer. The first of these I am told I finally going to happen this year. The second is also possible, given that it used to run.

These are only suggestions - some may be possible, some may not. But if we could improve the food of each person, we could improve their health, their resistance to disease, and the quality of their lives. If we could improve cash incomes, we would enable people to have more goods, better clothes and houses. In short a better life.

I thank you for your patience and listening to me for so long.