

Joanna Lindqvist  
Lundellska skolan  
Uppsala, Uppsala län, Sverige  
Zimbabwe, Sustainable Agriculture

## **Republic of Zimbabwe - A country that could become self-sufficient in food production**

### **Introduction**

Zimbabwe is one of many countries in the world that today faces many challenges. The country is suffering from political unrest, where the authoritarian leadership is characterized by corruption, which in turn has contributed to high inflation. Up to 80 percent of the population lives in poverty and cannot afford food and only 6.4 out of ten have access to clean water (NE, Zimbabwe). In addition, the country has been hit by drought and destroyed crops. In 1990, the country was hit by an economic crisis, which led to destroyed infrastructure in the form of, for example, a non-functioning school system, lack of healthcare and fuel shortages (Globalis, Zimbabwe). Three to four million have emigrated (NE, Zimbabwe), teachers and nurses, among others, due to poor salaries. In other words, there has been a so-called "brain drain" in the country (Globalis, Zimbabwe).

### **Basic facts**

The Republic of Zimbabwe is a unitary state located in southern Africa and borders South Africa, Mozambique, Zambia and Botswana (Landguiden, "Geografi och Klimat", Geography and Climate). The country had 14.8 million inhabitants in 2020 (Population Pyramid, 2020) and the country's capital, Harare, had 1521,000 inhabitants in 2019. The country's area is 390,757 km<sup>2</sup> (Landguiden, Zimbabwe). According to the Freedom-house democracy index from 2019, the country gets 29 out of 100 points (Freedom House). The railway network is the most important mode of transport in Zimbabwe, as it lacks its own port. It is relatively developed unlike other African countries. There are also two airports, one in the capital Harare and one in the city of Bulawayo (NE, Zimbabwe).

### **Climate and natural resources**

The country's climate is subtropical and has dry season from August to November and rainy season November to November. This is because there are trade winds coming from Indian Oceania. The average temperature during July, which is the coldest month is 14 degrees and the warmest month, which is October, is 21 degrees. The country largely consists of high plateaus and to the east is a mountain landscape with tropical vegetation. There is also the country's highest mountain Inyangani (2,595 m above sea level). To the west are large swamps. Three major rivers in the country are the Zambezi, Limpopo and the Save-Runde (Landguiden, "Geografi och Klimat" Geography and Climate). In 2010, the country had 11 national parks. The mining industry is also important as the country has plenty of minerals. Some examples of important minerals that are mined are gold, silver, diamonds, nickel, platinum, copper, cobalt and more (NE, Zimbabwe).

### **Ethnic groups and languages**

Two thirds live in the countryside (rural) and one third in the cities (urban). The average life expectancy is 61 in 2018. The birth rate is 33.1 per 1,000 inhabitants and the mortality rate is 8.1 per 1,000 inhabitants. Overall, population growth is high and the population young. Just over four out of ten of the country's inhabitants are under 25 years of age. On the other hand, the natural increase in population stopped in the twentieth century, as a result of mass emigration and the AIDS epidemic. The Bantu people, who belong to the largest ethnic group in the country, are divided into Shona, which makes up 70-80 percent of the population, and Ndebel, who make up 15-20 percent of the population. Shona lives mainly in the eastern and northern part of the country. There are a total of 16 recognized official languages, of which Shona, Ndebele and English are the three largest languages.

Shona and ndebele are read in school and English is spoken mainly in the cities (Landguiden, "Befolkning och Språk", Population and Language).

### **Family and children**

When it comes to the family situation in Zimbabwe, there are many children who have been abandoned by their parents and thus do not live with their parents. 48 percent of children live in rural areas and 4.8 million children live in poverty or extreme poverty. It is these children who have the least access to education (see paragraph below), information, food, sanitation and healthcare (UNICEF).

The average salary after tax is approximately 112,700 Zimbabwean dollars (ZWL), which corresponds to approximately 2626 Swedish kronor (SEK) or 0.31 USD (Cost of Living in Zimbabwe). This leads to few families earning enough money to be able to eat three meals a day (NE, Zimbabwe). For example, the cost of a bottle of 1.5 liters of water is 495 ZWL (about 11.5 SEK or 1.36 USD) and a dozen eggs about 725 ZWL (about 15 SEK or 2 USD). Other examples of expenses that a family needs to take into account are housing costs and clothing. A home in the country can cost 587 ZWL per square meter (approx. 13.6 SEK or 1.62 USD). Basic expenses for the home such as electricity, heating, cooling, garbage and water cost about 24,878 ZWL (about 580 Swedish SEK or 0.06 USD) per 85m<sup>2</sup>. A pair of jeans costs about 12 ZWL (0.32 SEK or 0.03 USD). All price information is taken from "Cost of Living in Zimbabwe" (retrieved 2021-03-01) and the currency conversion comes from the currency converter at [www.xe.com/sv/currencyconverter/convert/?Amount=12.294&From=ZWD&To=SEK](http://www.xe.com/sv/currencyconverter/convert/?Amount=12.294&From=ZWD&To=SEK) (retrieved 2021 -03-1). Update to USD 2021-08-23 on the same website.

### **Education**

During the 1980s, Zimbabwe developed its education system into one of the best in southern Africa. The country has a compulsory, seven-year primary school that begins at the age of six. Then there is the secondary school which lasts for four or six years. The latter in turn entitles to further studies at university. Until 1990, the country had a university in the capital, specializing in science and technology (NE, Zimbabwe).

As mentioned earlier, however, many Zimbabwean children do not have access to education. Some reasons for this are, for example, poor quality school materials, economic crises, reduced government grants, and high school fees. The cost of a child's schooling in the international primary school is about 301 8750 ZWL (about 70 353 SEK) (Cost of Living in Zimbabwe). It is also difficult to control attendance at school, which has led to a decrease in the proportion who start school, from 80 per cent in 2001 to 65 per cent in 2006. For example, in 2002 four per cent of the population continued their studies in higher education (NE, Zimbabwe).

### **Politics and agriculture**

Zimbabwe has once been one of Africa's richest countries with its vast resources in the form of very fertile land (Globalis, Zimbabwe). This meant that the country has been self-sufficient in food, but today the country is suffering from famine and is in need of assistance. Political unrest and corruption have led to a ruined agriculture and a land in ruins. Two thirds of the inhabitants receive their income from agriculture. In the country, there is a big difference between commercial agriculture (plantation agriculture) and livelihood agriculture. In 1990, commercial agriculture produced 80 percent of the country's market crops, which occupied 40 percent of the agricultural land (NE, Zimbabwe).

To understand the challenges of Zimbabwe's agriculture today, we must provide a political and historical background. In Zimbabwe's history, their former president Robert Mugabe (1924-2019) is a

key figure. In 1962, he became general secretary of the Zimbabwe African National Union (ZANU) party. During his time in power (1987-2017), he carried out agricultural reforms that became very violent with massacres, and many died. In 1990, a land redistribution law was passed, which meant that the state could buy land in the commercial sector. This led to the country for a long time being dominated by about 4,000 conventional farms, which were mainly owned by white farmers. The number of farms of this type decreased to 600 in 2003, as a consequence of the violent land reforms. The purpose of these was to divide the large holdings into smaller units. The white farmers in the country were expelled, as Mugabe wanted the blacks in the country to own the land (NE, Robert Mugabe). The problem was that the new landowners lacked the knowledge, tools and resources to run the high-tech agriculture that the white farmers had used (Globalis, Zimbabwe). The corruption associated with this was, and is, a significant problem in agriculture as a whole.

Important crops grown in Zimbabwe are maize, barley, millet, peanuts, soybeans, beans and wheat. Export crops grown in the country are, cotton, sugar and tobacco. The tobacco grown in the country is known for its high quality. Zimbabwe is also one of the few African countries that is allowed to export meat to EU areas (NE, agriculture).

### **Agricultural problems**

Initially, examples of general challenges facing Zimbabwe were mentioned, but one of the biggest challenges for the country has to do with famine, food security and agriculture. These are large and complex societal issues, with many commercial parties involved. It is everything from the farmers in the countryside, who sell their harvest in the market, to the political system in the country, with those in power legislating. With a hungry population combined with a high prevalence of corruption, it is difficult to build a country. This is because time and energy are spent on surviving and having food for the day, while corruption in itself hampers the country's development. In addition, hunger is strongly linked to conflicts (UN, World Food Program). Based on this, the investment in more efficient agriculture is very important for the country and for its inhabitants (ie at the individual level), both in terms of development and prosperity. In this essay, I will hereby present three suggestions for solutions in this area based on Zimbabwe's situation.

The Swedish Development Aid Authority (SIDA) writes in a press release "Sida supports efforts due to severe food shortages in Zimbabwe" (2020-12-15, SIDA), about the drought that Zimbabwe is suffering from, and that this leads to acute food shortages in large parts of the country. According to Carin Jemtin, SIDA's Director General, this could also affect future harvests, as the rainy season will be delayed. Livestock, such as donkeys, have also been affected by the drought due to a shortage of animal feed. However, it is not the drought that is the biggest cause of these problems in agriculture, but Zimbabwe's high inflation that leads to high food prices. Other reasons that SIDA addresses include a lack of banking systems with the difficulty of gaining access to physical means of payment, corruption and destroyed infrastructure. The press release also mentions that the lack of petrol in the country results in people not being able to afford petrol, to go to the market and sell food. 1 liter of petrol costs about 418.6 ZWL (about 10 SEK) (Cost of Living in Zimbabwe, Prices in Zimbabwe).

### **Solutions**

#### **Earlier examples of aid**

In 2020, the UN Food Program and the organization Action against Hunger received financial support from SIDA to help Zimbabwe with agriculture and food. The assistance consisted of distribution of cooking oil, maize and cultivation equipment, but also cash support for the elderly, the disabled and widows with children, in order to be able to buy food on the market (SIDA). Tree planting projects are also being done in Zimbabwe because there is a problem with large-scale deforestation in the country (Landguiden, "Jordbruk och Fiske", Agriculture and Fishing).

Before starting with my solutions (and solutions in general), you must first find out what the country's culture and social structure is like, in order to form an idea of what kind of solution could be implemented. Based on that, you can adapt the project to the selected village / location. It is also important to find out what knowledge already exists and is used in the country you are going to work in.

### My solutions

My three suggestions for solutions for sustainable agriculture are agroforestry, cooperative agriculture and education in agriculture. The starting point in all suggestions is to use these solutions in one or a few villages at a time. That is, mainly work at grassroots level. The table below presents the advantages and disadvantages of the suggestions:

Solutions	Strengths (advantages)	Weaknesses (disadvantages)
Agricultural education	<ul style="list-style-type: none"> <li>• Bridges farmers' knowledge gaps</li> <li>• The basis that will ensure that the other projects are successful</li> </ul>	Can't think of any obvious weaknesses
Agroforestry	<ul style="list-style-type: none"> <li>• Food during an extended period (i.e. seasonally-based since different crops are cultivated)</li> <li>• Also medicinal herbs could be cultivated</li> <li>• Increased biodiversity</li> <li>• Natural fertilisers from cattle</li> <li>• Beehives – honey bees brings pollination and honey</li> </ul> <p><b>The trees:</b></p> <ul style="list-style-type: none"> <li>• Bind water – counteract drought and soil erosion</li> <li>• Could be used for timber – may be used in fires and/or be sold</li> <li>• Fixate nitrogen in the soil – good for the plants</li> <li>• Bind carbon dioxide</li> <li>• Give fruit, animal feed, shadow for other plants and nutrients for the soil</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult in large-scale farming</li> <li>• Takes a few years to implement – not too many years though</li> <li>• Difficult to plan what to cultivate due to drought</li> </ul>
Agricultural cooperatives	<ul style="list-style-type: none"> <li>• Owning the land together – enhances better collaboration</li> <li>• Better prerequisites for sending children to school</li> <li>• Investing in agriculture together – better price</li> <li>• Women and men own land – improved equality</li> </ul>	<ul style="list-style-type: none"> <li>• It is still expensive to send children to school</li> <li>• Difficult to engage the women</li> </ul>

### Agricultural education

Zimbabwe's agriculture is under special circumstances, as their capacity to be self-sufficient is not fully exploited and exploited. Therefore, my first solution is to build schools, which train the villagers and their leaders, how to make agriculture more efficient. In the training, equipment and tools will be distributed to the local population, which they will learn to handle. If needed, training in hive

management would also be included in the training, which can be used in my suggestion about agroforestry (see paragraph below). The idea is thus to fill the knowledge gaps that arose in connection with the expulsion of the white peasants from the country, and to provide knowledge that can be passed on to future generations.

### **Agroforestry**

My second suggestion is to build up so-called agroforestry. This means creating your own ecosystem that benefits biodiversity, by planting different crops and trees together on a smaller area. This area also has livestock such as goats, chickens and donkeys, which thrive in Zimbabwe. This provides meat, milk and eggs to the population. The agroforestry solution also contains a number of other positive effects. If we start with the trees, they bind nitrogen in the soil, carbon dioxide in the leaves and its large roots bind water. The binding of water counteracts drought and soil erosion. This is relevant when Zimbabwe is suffering from drought. The trees can also give fruit to the people, leaves that the cattle can eat, fallen leaves that nourish the soil and shade other plants. In addition, the trees can become timber that you can fire with, or sell, if needed. When it comes to crops, the idea is that the cultivation of different crops nourishes the soil and natural manure from the cattle as well. This reduces the need for fertilizer. The idea is that you can grow more seasonally adapted food, so that you get food for a longer period during the year. Medicinal herbs can also be grown, which may be necessary, because many poor people lack access to health care. However, the drought and the delayed rainy season, due to climate change, can make it difficult to plan which crops to grow when. An additional idea is to apply hives. With these, the farmers / villagers get pollinators and also free honey, which you can eat or sell, as well as beeswax.

### **Agricultural cooperatives**

With an agricultural cooperative (ie where several people own and use the land together), the collaboration out on the village fields would be improved, and investments / expenses in the form of, for example, machines could be distributed. When many adults can work in the fields, it is easier to send the children to school, because many children otherwise need to help in the fields for the family's income. Children's education is the most important thing to get out of poverty, in the long run. However, agricultural cooperatives will not in itself solve the problem of the expensive school fees. An additional aspect of agricultural cooperatives is the gender perspective. Most often, it is the women who cultivate the land and sell what is harvested on the market, while it is the men who own the land. If cooperative agriculture were to make women own the land as well, it would in the long run be able to promote gender equality. However, it must be borne in mind that the inclusion of women in cooperative agriculture can be difficult, as patriarchal society is dominant in Zimbabwe's social structure.

### **Implementation in practice**

Appropriate bodies for the implementation of my proposed projects are the UN agencies World Food Program (WFP) or the Food and Agriculture Organization of the United Nations (FAO). WFP receives mainly government grants but also from companies and private individuals. Both of these bodies also receive support from SIDA, which in turn is financed by the Swedish government. SIDA itself could also pursue my proposed solutions. Alternatively, human rights organizations such as the Red Cross, Individual Humanitarian Aid and the Medical Mission. In that case, the financing would consist of, among other things, gifts from private individuals, as well as volunteers.

I imagine that you can work with Zimbabwe's agricultural development by working in parallel with all three of my suggestions. By this I mean, for example, that the local population is trained in streamlining agriculture (which is my first suggestion), while working on the development of agroforestry. Then you can imagine that you use agricultural cooperatives in agroforestry, so that more people own it.

### **Long-term sustainability**

### **Common positive effects**

If agriculture is made more efficient with the help of my suggestions, it can in the long run lead to the farmers getting a larger surplus of food, which can be sold inside the city's markets. This means less hunger, greater income for the farmers, and a greater supply of food for both the rural and urban populations. A greater income for the farmers can lead to more people being able to pay school fees for their children, and thus poverty is broken in the long term. Another positive effect is that the country can export more food and it benefits the whole country.

### **Common challenges**

#### **Corruption - a big problem**

My three proposals for sustainable agriculture in Zimbabwe have common challenges. One of them is that corruption permeates the country's state apparatus, and this is also evident in agriculture.

Whatever solution is used for sustainable agriculture in Zimbabwe, this phenomenon is very difficult to change. It would require the whole country to move towards a more democratic government, where laws and penalties against corruption are introduced. Only then could corruption be counteracted much more easily, and reduced in the long run. Another idea is that when people are better off with the help of streamlining their agriculture, it can counteract corruption, as they feel that they are making better money on agriculture than before, and that they can afford basic necessities. The desperation of a hungry population decreases when more people can eat their fill.

Another problem with implementing these solutions is that the local culture and structures can lead to the local population returning to what it was before the project was implemented. This is because it is difficult for outside parties to change a country's culture and social structure. To prevent this from happening, I have three suggestions on how to work. Firstly, it is important for a long period of time to build trust with the local population, and bring the leader into the village. This is because the leaders in the villages have a lot of local power and are listened to by the people. Secondly, you can have employees / volunteers on site for several years to ensure that the development goes as planned. Then you can help on the spot, for a longer period of time. Thirdly, it is important to have feedback and follow-ups to the village / place where the development assistance project was carried out. For example, by going back to see how things are going with the development. This would also include checks on whether or not corruption occurs, where the aid project has taken place. In addition, the follow-up provides an opportunity to evaluate whether the project was effective or not, and to realize any mistakes that have been made. Then you can improve new aid projects for the future. Follow-up is something, for example, SIDA and WFP work with.

### **Conclusions**

To sum it all up, Zimbabwe really has the potential to become self-sufficient in food again. The country has natural resources, but lacks human capital (i.e. knowledge) and real capital (i.e. access to machinery and equipment). The country's history of corruption and inflation is central to the country's destruction of agriculture, but the drought is also a contributing factor. To work towards sustainable agriculture in Zimbabwe and repair the shortage of human and real capital, my suggestions for solutions are education in agriculture, agroforestry and cooperative agriculture. A combination of these would in the long run benefit the farmers, the women, the children, the rural population, the urban population, the environment and contribute to the development and prosperity of the whole country.

### **References**

*Globalis*, 2013-10-31 "Zimbabwe" <https://www.globalis.se/Laender/zimbabwe> (retrieved 2021-02-21)  
*Landguiden*: "Befolkning och språk", <https://www.ui.se/landguiden/lander-och-omraden/afrika/zimbabwe/befolkning-och-sprak/> (retrieved 2021-03-03)  
*Landguiden*, "Geografi och klimat", 13th of August 2020, <https://www.ui.se/landguiden/lander-och-omraden/afrika/zimbabwe/geografi-och-klimat/> (retrieved 2021-03-03)

*Landguiden*, "Zimbabwe", <https://www.ui.se/landguiden/lander-och-omraden/afrika/zimbabwe/> (hämtad 2021-03-03)

*Landguiden*, "Zimbabwe - jordbruk och fiske" <https://www.ui.se/landguiden/lander-och-omraden/afrika/zimbabwe/jordbruk-och-fiske/> (retrieved 2021-03-03)

FN, 2021, *World Food Program*, <https://sv.wfp.org/konflikt-och-hunger/> (retrieved 2021-02-21)

*Freedom House*, 2020, "Zimbabwe" <https://freedomhouse.org/country/zimbabwe/freedom-world/2020> (retrieved 2021-02-18)

*Nationalencyklopedin*, "Mugabe, Robert", <http://www.ne.se/uppslagsverk/encyklopedi/lång/robert-mugabe> (retrieved 2021-02-14)

*Nationalencyklopedin*, "Zimbabwe", <http://www.ne.se/uppslagsverk/encyklopedi/lång/zimbabwe> (retrieved 2021-01-21)

*Numbeo*, 2021, Cost of Living in Zimbabwe. Prices in Zimbabwe. (retrieved 2021-02-16)

*Population Pyramid*, 2019, <https://www.populationpyramid.net/zimbabwe/2020/> (hämtad 2021-03-03)

SIDA, 2020-12-23, "Kontroll av biståndet", <https://www.sida.se/sa-fungerar-bistandet/kontroll-av-bistandet/> (retrieved 2021-02-28)

SIDA, 2020-12-15, "Sida stödjer insatser med anledning av svår matbrist i Zimbabwe", <https://www.sida.se/om-sida/pressrum/pressmeddelande-och-pressinbjudningar/sida-stodjer-insatser-med-anledning-av-svar-matbrist-i-zimbabwe> (retrieved 2021-02-04)

UNICEF, "Situation of Children" <https://www.unicef.org/zimbabwe/situation-children> (hämtad 2021-02-11)

*World Population Review*, 2021, <https://worldpopulationreview.com/country-rankings/hdi-by-country>

*XE.com (Valutaomvandlare)* (retrieved 2021-03-1)

<https://www.xe.com/sv/currencyconverter/convert/?Amount=12.294&From=ZWD&To=SEK>