

Kingdom Report

Week of 22 February 2020

Part 3 Solutions: The Biblical Solution of Jobs for the Poor

There is a Biblical solution to the economic crisis of joblessness in all of Southern Africa. But it means we start with the 1st and 2nd Industrial Revolution instead of dreaming about the 4th Industrial Revolution.

If you read carefully in the law of Moses there is an interesting program of poverty alleviation set out for the nation of Israel. There is a welfare plan for immediate help to those who are hungry and have no prospect of work and need immediate help. I will not cover those scriptures here.

Then there is the next step to poverty alleviation....the creation of jobs for the poor who want to come off of welfare and want to work. I will use that as our Biblical solution basis for this week's blog. But let me say this. I am proud of our country's welfare program of social grants to some 17 million people who are helped every month. For so many that is the difference between food on the table and starvation.

However not many actually want to live on welfare handouts. I think especially of those more than 10 million unemployed who do not qualify for social grants and desperately want to work. Multiply that across the 10 nations of Southern Africa and we have a crisis of unemployment that is heartbreaking to see.

Here is my starting solution:

Lev 23:22 *And when ye reap the harvest of your land, thou shalt not make clean riddance of the corners of thy field when thou reapest, neither shalt thou gather any gleaning of thy harvest: thou shalt leave them unto the poor, and to the stranger: I am the LORD your God.*

When this was written and proclaimed by the Lord, agriculture was 90% of the GNP of the Israel nation. What the Lord is saying is that a certain portion of the productive output of the national economy must be set aside as job creation for the poor. The Lord is not saying, after you bring in the harvest which is the income of the nation, set aside a certain portion of that and give it to the poor and the stranger as a welfare handout. He says give a certain portion of the productive capital of the nation for the poor to work and reap the economic benefit for themselves through work.

I appreciate what churches and welfare groups and government are doing to distribute welfare to the poor, but people need to work....they need work for the dignity it gives a person, they need it for the character development it produces, the young people especially need to grow up with an ethic of work and the connection between production and consumption.

God tells Israel, give the poor work to do! There are many 'work scheme' ideas from government and industry. But I believe the church in South Africa needs to get into this issue. And don't look to the pulpits. I have yet to hear one preacher actually deal scripturally with God's plan for prosperity. Mostly it is all about tithing and giving and magic money from nothing. So here is my interpretation and application of this scripture for an economic prosperity revolution for Southern Africa:

I ask, what can the poor....and by that I mean not just they have no money but also they have no marketable skills, there is no demand for their labour....what can the poor do now to work? What portion of the economy can we now give to the poor to apply their low skills level and lack of capital.

Let me say what is not going to work. There are all these fancy ideas of we need to teach children to "code" for IT work etc. Then there are these huge money boondoggles by government department for work schemes that usually end up in the pockets of "consultants" and politically connected "cadres" or cheap loans to cadres to buy existing companies.

Government big shots dream of high speed trains and 4th Industrial revolution of wired smart cities. All high capital projects and high skilled elite jobs. Forget all that. Forget about "foreign investment". All that means is foreign vulture funds buying up government debt bonds and buying up our crown jewels of companies that took us a hundred years to build up all ending up in foreign ownership and the profits leaving South Africa for overseas tax shelters.

We need to start with the reality of 10 million people with no skills to low skills and an economy with low savings. That means capital expenditure per job created has to be low to make an impact.

My prescription: Before dreaming about the 4th Industrial Revolution lets start instead with the 1st and 2nd Industrial Revolution that lifted the western world out of poverty. Here I am talking steel and steam and chemicals and energy.

What started the 1st Industrial Revolution was cheap steel and that combined with the steam engine produced a transport revolution that crisscrossed continental Europe and America. After this came the chemical revolution mainly out of Germany when scientists found out what made elements and how to make products from chemicals. Cheap and pervasive transport along with a host of new products from chemicals created a jobs and wealth revolution.

How do I see that working here in Southern Africa?

Firstly we need to go back to cheap steam locomotives and a localmade rail transport network in private hands

Secondly our entire fuel industry of petrol and diesel needs to be switched from imported oil as feedstock to biofuels made from our abundant biomass availability. These two policy shifts will create literally millions of jobs for the poor to participate in.

Let me give you some interesting facts:

Famously Transnet spent R54 billion rand on acquiring 1054 locomotives. This is an enormous waste of scarce capital. Our rail network is decrepid and dangerous and totally wrong for us as a nation. The national rail strategy and in fact the whole transport strategy of the nation is far to capital intensive and totally reliant on imported high technology products. They are bankrupting us as a nation and not providing a proper transport infrastructure for either industry or passengers.

At present Transnet has 3,500 locomotives. One loco costs between \$3,5-\$4 million. Transnet has a rail network of 360,000 kilometers of which only about a third is now used. Transnet used to employ 460,000 workers and had trains running to the smallest towns across South Africa. And this is the kind of locos we used to have:



This was built in 1981. **South African Class 26 4-8-4 Red Devil**

This monster had 4,500 HP, better than most diesel electrics of today. And here is the good news: We can build this monster entirely with our own resources, no complicated software and electronic parts from overseas and the maintenance is easy. In last week's newspaper I saw some steam rail enthusiasts in Germiston with an old leased steam loco belonging to Transnet, the loco was called 'Susan' and it was 100 years old and still operating! That is what these beauties can do....60-70 years of faithful service. And no imported diesel needed or expensive Eskom electricity to run them. We have 1000 years of coal supplies at current coal usage.

The entire Transnet rail system needs to be privatized, we need to make our own locos, we need to provide finance so new black entrepreneurs can lease their own steam engines and wagon and given rail usage concessions to offer passenger and freight services cheaply. When the locos are cheap and made by ourselves and the coal fuel is cheap...then we can get back to 460,000 rail workers and instead of people flocking to the cities and abandoning the countryside small town will revive with cheap and reliable rail transport connections.

The export potential for our steam train technology across Africa and around the world will be enormous. Nobody is making these locos anymore. China is literally bankrupting some African nations by offering places like Kenya \$7 billion loans for a Mombasa to Nairobi train project. Looks great and all high tech....except Kenya can't afford it. And neither can other African countries afford this high tech.

Europe and America and the world industrialized on steam power locos. All the way till the 1950's and 60's these were still in operation. We need a vast rail network connecting all 10 nations of Southern Africa so that trade and commerce can flourish. Thousands of new locos will be needed but not at \$3,5 million per loco. And fortunately Botswana right in the middle of Southern Africa has 250 billion mt of coal lying there unused. Our steel industry will get a massive boost with needs for rail cars

and locos and tens of thousands of kilometers of new track. This is the kind of infrastructure build that will employ hundreds of thousands of low and unskilled labor and allow them a path upwards to trade skills. It will allow others to learn managerial skills of running their own rail lines. It will connect the vast resources of Southern Africa with cheap and reliable transport to move people, minerals, food...all across the region for an integrated market economy. And we will build it ourselves with our own technology and maintain it with our own resources.

The Biofuels Revolution

I hear that the government wants to spend \$12 billion on a new oil refinery in PE at Coega. This is once again a financial boondoggle and puts the nation further into international debt with the wrong strategy for economic development.

Transport fuels are that section of the national economy that can have the greatest impact on allowing the poor to have a part of the economy that they can supply with their labour.

The current world economy is built on the 'Hydrocarbon Economy'. Hydrocarbons mean oil, gas and coal. It means that the basic three elements of hydrogen, carbon and oxygen found in oil and gas and coal are extracted to form a range of fuels like diesel, petrol, jet fuel, kerosene as well as an enormous range of other chemical based products like plastics etc.

Here in South Africa back in the 1950's the government started SASOL in order to use the hydrocarbons in coal to make all these various fuels and chemicals. Everyone at the time said this is a waste of money, oil is cheap, but South Africa had huge reserves of coal and needed to be independent in fuels for strategic reasons. Today everyone recognizes that SASOL is a huge economic success story.

Here is the opportunity for the poor of Southern Africa:

The biotech industry over the decade have made incredible advances in technology so that we can now ditch hydrocarbons as source material for oxygen, hydrogen and carbon.....we can now use biomass! This is the coming 'Carbohydrate Economy'.

All forms of biomass whether grasses or trees or maize or cassava, they all are made of carbohydrates meaning....oxygen, hydrogen and carbon. And the technologies now available make it cheaper and easier now than any time in the past to extract these valuable elements and convert them like what SASOL does with coal....rearrange those elements into useful fuels and chemicals.

The key resource you need from all forms of biomass is glucose. Yes good old sugar. That is what your body does is to convert starches like bread and pasta into glucose and your body needs that for energy. Well the chemical industry works the same. They need millions of tonnes of glucose syrup to feed to yeasts and bacteria specially engineered to eat that glucose and make valuable chemicals and fuels from it.

Here is what would happen in a Carbohydrate Economy: Every or any small farmer can grow a favoured biomass whether a grass or a starch like cassava. Then a group

in the village uses simple technology to turn that cellulose or starch into glucose syrup. That glucose syrup is sold to a company that purifies it and then sells it to large fuel and chemical companies to make ethanol, or butanol for fuel or kerosene for jet fuel or chemicals like plastics or paints or other industrial chemicals.

With the vast agricultural potential of Southern Africa and a cheap and efficient private rail network across the region the remotest village can be making glucose for sale and in return buy consumer goods with their earnings. Millions of jobs can be created this way all across rural Southern Africa as we give low skilled poor people a product they can make where they are that has economic value. It means no more oil import costs. It means self sufficiency in transport fuels, chemicals, increased buying power from rural areas, increased consumer goods production for poor people who now have buying power....instead of money going offshore to oil producing nations.

Just a policy change across all of Southern Africa to switch to steam power and a vast private owned and operated rail network across the 10 nations of Southern Africa with a policy of a switch from the Hydrocarbon Economy to the Carbohydrate Economy will absolutely create millions of new jobs for poor people who only have a piece of land and their physical labour to become meaningful contributors to the national economy. And all other sectors of the national economies will greatly benefit by it....and will not take vast investments from overseas to do it. We can do it now with our own finance our own technology and our own resources.

I believe the people of God have the solutions to the poverty issue of Southern Africa. I merely propose something in my area of expertise in the biotech field and what I have researched on steam technology. Other have many more practical solutions.

What we need is a vision that this is something that the Lord wants done, the Lord is full of compassion for the poor and He wants to do something about it but He works through us, His hands and feet on earth.

We as a church need to move away from simplistic and scripturally incorrect ideas about wealth creation. We need to get beyond welfare. We need to start a serious discussion about the theology of work and the production of goods and services, about how we can design an economy that achieves God's intentions for discipleship through work.

And we need to get serious about getting God's resources out of the hands of the sinners who waste and destroy and into the hands of the righteous who will invest and build.