Supp Mat 4: Full narrative of the Bye Poverty scenario selected by the community.

The first part shaded in grey is the synopsis capturing the 5 states of the future of the driving forces. The rest of the text is the results of the integration of the remaining 30 factors of change in a future state influenced by the context set-up by the synopsis.

A1 B3 C1 D1 E1 Chaitemura Chavakuseva – Bye poverty!

In 2038, there is a mix of local and foreign culture with good governance, empowered local leaders and cross-cutting inclusiveness in land use allocation. Due to the adoption of solar energy, there is well adapted irrigation which promotes mixed farming using adapted livestock breeds and crop varieties with high value markets. As a result, the level of poverty has been reduced to 30%. The poor are vulnerable groups (women, orphans and elders) scattered around the park.

The realisation of worsening land degradation has been promoted by an increased acceptance by the community of letting outsider experts and ordinary people to come and live and work among the community, bringing with them a lot of knowledge and expertise for natural resource management. The community has however remained careful to let only positive outside influence. This openness has led to people to collectively decide on adopting solar energy for household uses as well as powering irrigation pumps. A bonus benefit of this has been the cleaner air which is not polluted by wood smoke. Collective problem analysis by the community has made them realise that the problem of water availability has been caused by extremely high demand for water by livestock, wildlife and human beings. In response to this, collective action has led to wise use of water bodies by planned and mutually agreed allocation of water for livestock, wildlife, and human use, without overcrowding the water bodies. This has led to marked reduction in conflicts between commercial agriculture and wildlife. Before this, National Parks and the local communities were always quarrelling about livestock encroachment into Gonarezhou National Park in search of forage and water on one hand, and, wildlife encroaching onto the agricultural fields, devouring livestock and harming the humans. In 2038, this situation has greatly declined and the only illegal poaching for food is pronounced among the remaining very poor women, elders and orphans who are scattered along the Parks boundaries. At least now there is not the organized criminal poaching by big cartels as used to happen twenty years ago. Wildlife is managed by the GNP authorities with consultation of the local leaders who adequately and effectively represent their constituencies.

Large livestock have almost disappeared and small livestock raised on zero grazing is in good health. This has come by through leaders and ordinary people having extensive discussions about what type of livestock production would be beneficial, considering the changing climate. Agriculture is a focal investment area and is supported by agribusiness development. The area is generally prosperous due to investment from outside through joint venture between local farmers and supply chains and remittances from migrants. Value chain development is very vibrant for small livestock and small grain development in areas such as animal health services, grain processing, animal products processing and marketing. Wealthy people are successful farmers and local agribusiness owners and traders. The local governance structures enable women and previously disadvantaged groups to negotiate and participate freely and fairly in business ventures. Outmigration of young unskilled people has reduced as it is now lucrative to stay locally and

engage in agribusiness. The area has been connected to the national grid through public investment to support agriculture and agri-business.

There is a good all-weather tar road that connects the production areas to the Beitbridge-Harare highway from Malipati. Another one leads to the entrance of the Gonarhezou national park. These roads are maintained by the government but with very strong input of ideas and even resources by the local community who are well organised. Other roads under the responsibility of the local community remain untarred but the community always willingly collectively organises labour and some money to fix the road to make it passable during the rainy season. This is because their local business is so vibrant that they do not want bad roads to compromise their livelihoods.

Traditional farming knowledge and skills remain among the majority of the people but due to influx of experts and knowledgeable people, the farmers are capable of collectively deciding to adopt improved farming skills and technologies. Due to their exposure to the outside world through education, young local farmers have engaged in zero grazing and greenhouse farming after gaining technical knowledge and skills elsewhere. A technical centre for advanced farming has been built in the districti. Local youths who excel in high school are increasingly accessing higher education outside Malipati, but many of them return to live and work at home after graduation.

Most people have access to primary education where local culture and traditions are taught. Physical access to primary schools has greatly improved with school dropouts at high school level being only ten percent of what they used to be twenty years ago. Malipati village has a secondary school. Local education has greatly improved due to increased access to and adoption of ICT. Literacy is aligned on an economic divide between young local farmers and entrepreneurs with market-oriented technical training in agriculture and agri-business and a majority of people educated in the local culture and traditions. A generation of hard-working young agri-preneurs has emerged while most of the people remain deeply influenced by the local culture and traditions. This is actually good because the community through its good local governance is quite empowered to speak out against and block negative outside influence but collectively and inclusively discusses any new ideas. Chronic food insecurity is no longer very common.

A powerful relay antenna operating 24/7 has been built in Malipati village offering the possibility to high-speed connection to those who can afford it. At least 75% of the community actually affords this high-speed connectivity. There is pronounced use of internet communication mainly used for agriculture business activities such as communicating with the market, organizing for marketing activities as well as synchronizing local collective production with outside lucrative markets.

The population has remained stable and is no longer just concentrated along the tar road and the borders of the park but is concentrated in many clusters of activity which are focused on agribusiness activities. Demography policies are mainly very localised and focus on local visions of equity and progress. Primary health services are now widely accessible everywhere in Sengwe. Malipati has a well-serviced health centre and people travel outside Malipati only for major medical issues.

Overall, the land use policy is determined at the central level of the government and implemented by the local land agency of the government. Local community members are actively consulted and engaged in improved land use practices. There is now synchrony between national government land use policies and local community practices.