

## **Project Update: February 2024**

### **INFORMATION GATHERING AND ADMINISTRATION OF QUESTIONNAIRES**

After the first community and stakeholders meeting involving focal group discussion, the next activity was the development and administration of questionnaires to the communities earlier visited. The questionnaire was developed from the negative, positive and the solutions of the negative socio-ecological impacts of the location of the Yankari Game Reserve as expressed by the surrounding communities derived from the first stakeholder workshop held in 2023. All questions from the questionnaire were raised from the first stakeholder workshop. Questionnaires were administered to 32 individuals in each community cutting across strata of the community including men and women, people of various occupation and ethnic group, youths and elderly, etc. The communities visited to administer questionnaires were Maina maji, Yalwan Duguri, Dagudi, Gaji, Duguri, Gale, Sarkin Yaki Malla, Yalo, Garin Kweri, Jada, Mai-Ari, Kwala, Pali, Kuka and Bakin Ruwa. Mansur, Rimi and Dogon Ruwa communities were not visited due to some security issues. We were advised not to visit the three communities for safety reasons. We hope to still visit Mansur, Rimi and Dogon Ruwa when the security situation improves.

Generally, the community members who participated in the interview accorded us the needed cooperation, however there were intermittent disruptions of activity, as the local people needed to go to their farms, market or suspension of activities due to religious engagements. It was also difficult to access the women as they may not be available due to house chores and other restrictions. This was further affected by the high illiteracy rate in the communities, many sons and daughters of these remote communities are not literate enough to help with the questionnaire administration. Therefore, administration of the questionnaires in these rural communities took longer time than in the funded proposal.

At the moment, the questionnaire data has been fully generated. The next aspect of the project is analyses of the questionnaire data, this will be followed closely with validation and presentation of findings to stakeholders in the second workshop. Recall that the conservation site support groups will be part of this workshop.

Preliminary results of the negative, positive and the solutions to the negative socio-ecological impacts from the first stakeholders' workshop are presented in Figures 1-3 and Tables 1-3. Kafi community stood out in recounting the highest negative socio-ecological impacts across all the communities. The least of which is the Yalo community. Generally, the communities lamented lack of provision of social amenities as the most impactful negative socio-ecological outcomes of the Yankari Game Reserve to the communities (Figure 1 and Table 1).

For the positive socio-ecological impacts, Gaji, Gaji Gamu, Mai-Ari and Pali communities admitted the highest benefits in a similar fashion as compared with 12 other communities. The least community that agreed to some positive outcome of the reserve is the Kafi community. Generally, the communities appreciated the positive outcomes of provision of social amenities such as electricity and portable water in some communities, intrinsic value, tourism and international linkages, provision of employment (though inadequate),

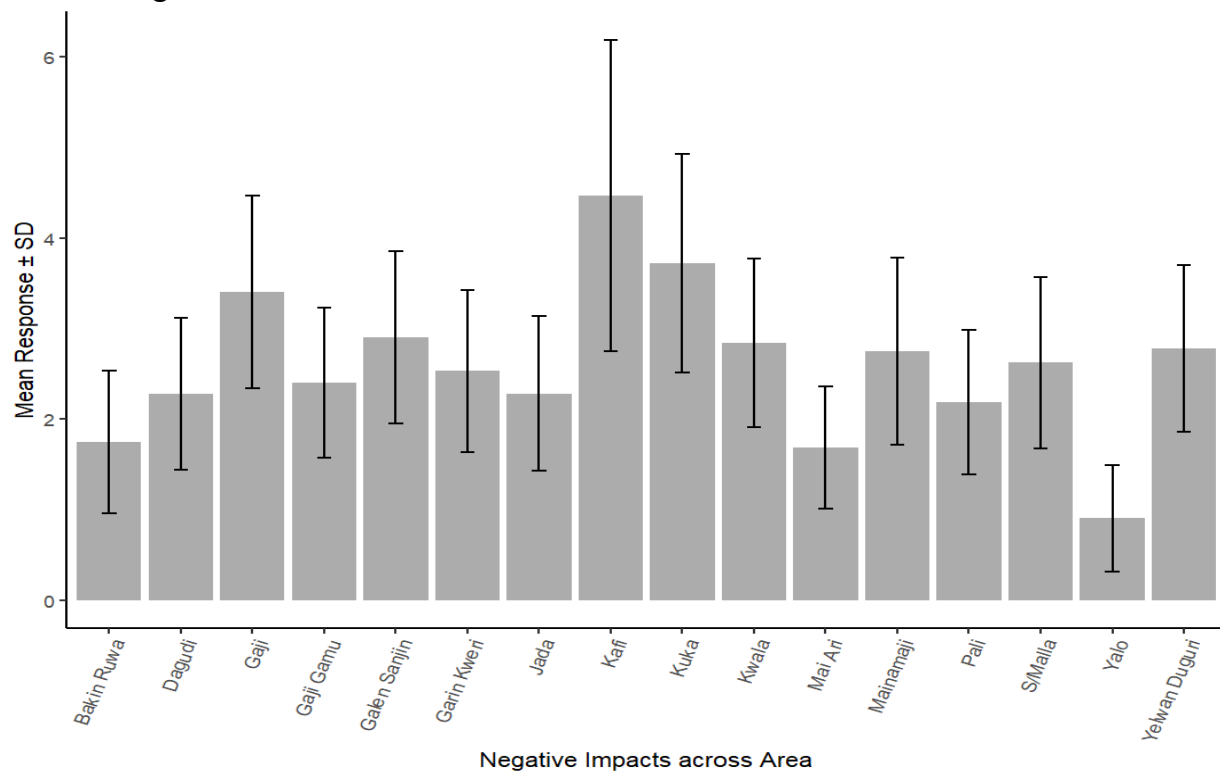
provision of fuel-efficient stove and collection of non-timber products such as herbal medicine and fruits. They however expressed a sudden halt in providing these positive socio-ecological outcomes for over a decade now (Figure 2; Table 2).

When it comes to proffering solution to the negative socio-ecological impacts of the location of the Yankari Game Reserve to the surrounding communities, again, Kafi community stood out in contributing to how to minimise the negative outcomes by employing the indigenous people adjoining the game reserve (Figure 3; Table 3)

More reports will follow when data from the questionnaires are analysed.

We thank community members who avail us the opportunity to interview them and the Rufford Small Grant for their funding. As gatekeepers, we appreciate the village heads for availing us access to their communities for this exercise. We also appreciate immensely the A.P. Leventis Ornithological Research Institute (APLORI) and management of the Yankari Game Reserve for their critical role in this project.

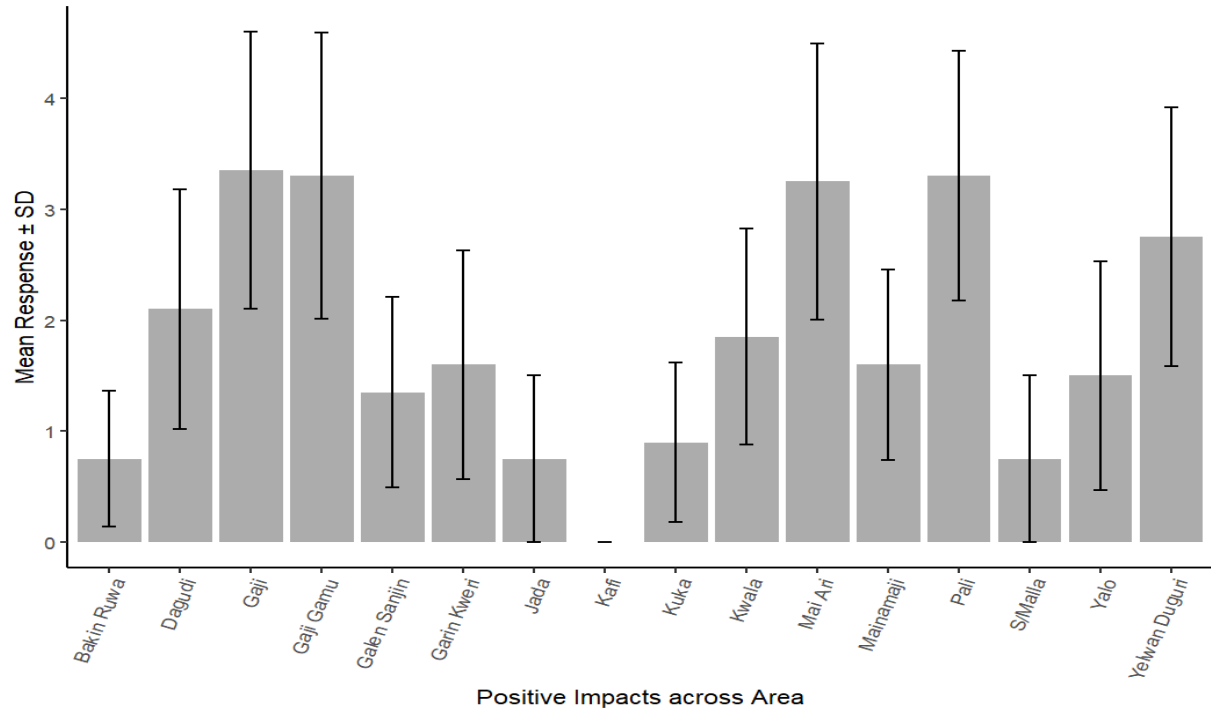
### Socio-Ecological Impact of the Yankari Game Reserve to Sixteen Communities Surrounding the Reserve.



**Figure 1.** Negative Socio-ecological impacts of Yankari Game Reserve as expressed by sixteen communities surrounding the Reserve.

**Table 1.** Negative Socio-ecological Impact of the Yankari Game Reserve as expressed by sixteen communities surrounding the Reserve

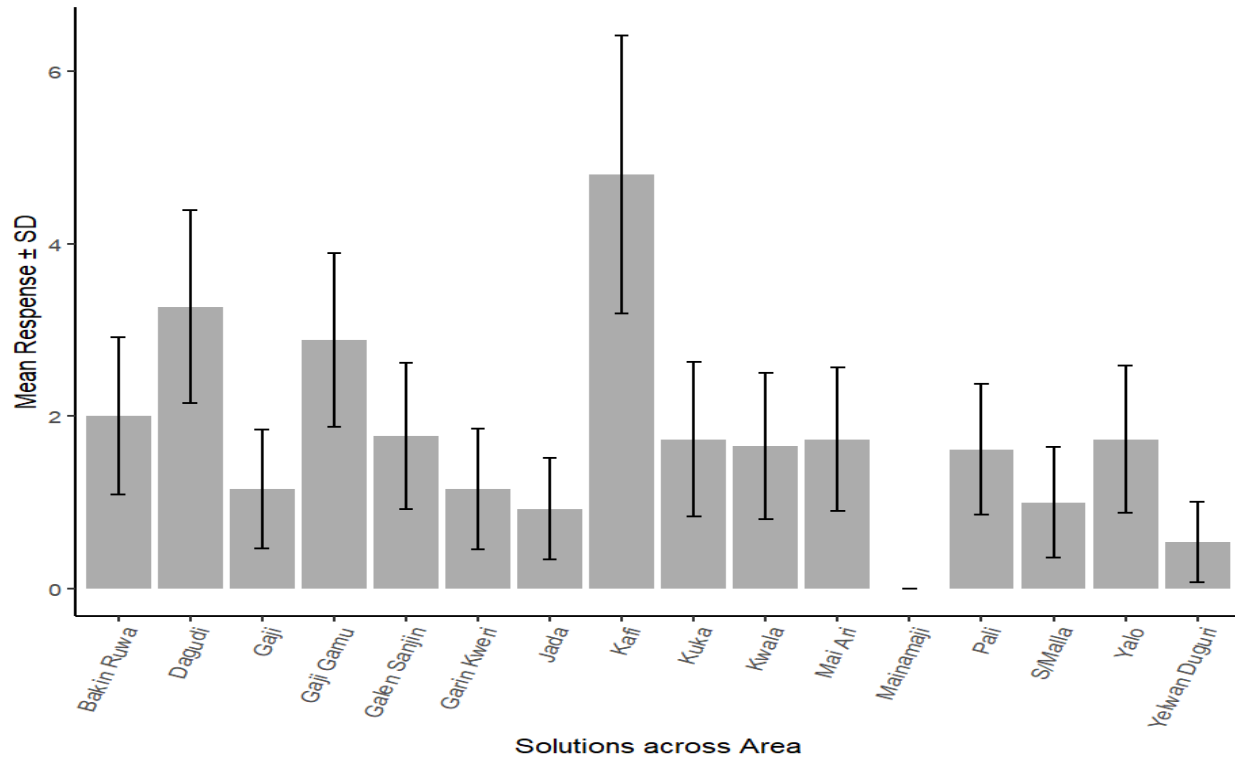
s/n	Negative Impacts	n	mean	sd	se	ci
1	"Biase and Lack of employment"	32	<b>4.94</b>	7.2	1.27	2.6
2	"Biase to women for community support "	32	<b>0.688</b>	2.89	0.511	1.04
3	"Crop raiding"	32	<b>7.66</b>	4.94	0.873	1.78
4	"Erosion and flood on farms near reserve due to grazing"	32	<b>0</b>	0	0	0
5	"False accusation, illegal arrest and harassment of communities"	32	<b>0.969</b>	3.24	0.572	1.17
6	"Hide out for criminals"	32	<b>2.56</b>	4.62	0.817	1.67
7	"Human wildlife conflict"	32	<b>0.281</b>	1.42	0.251	0.512
8	"Increased crime and poor policing"	32	<b>4.22</b>	6.05	1.07	2.18
9	"Lack of provision of social amenities"	32	<b>9.06</b>	9.68	1.71	3.49
10	"Loss of livelihood since relocation "	32	<b>5.06</b>	7.72	1.36	2.78
11	"Poor relationship and communication between communities and managers"	32	<b>1.84</b>	4.7	0.832	1.7
12	"Restriction on collection of non-timber products "	32	<b>0.688</b>	2.51	0.443	0.904
13	"Snake and Tse-Tse Fly bite and effects of disease on livestock"	32	<b>0.562</b>	2.23	0.394	0.803
14	"Stoppage of community involvement in adhoc jobs"	32	<b>1.34</b>	3.72	0.658	1.34
15	"Unwholesome behavior and immoral acts in the wikki spring"	32	<b>0.688</b>	2.72	0.48	0.98
16	"Wild animals killing livestock & humans"	32	<b>0.969</b>	3.39	0.6	1.22



**Figure 2.** Positive Socio-ecological Impacts of the Yankari Game Reserve as expressed by sixteen communities surrounding the Reserve.

**Table 2.** Positive Socio-ecological Impact of the Yankari Game Reserve as expressed by sixteen communities surrounding the Reserve

	<b>Positive Impacts</b>	<b>n</b>	<b>mean</b>	<b>sd</b>	<b>se</b>	<b>ci</b>
1	"Collection of non-timber products "	32	<b>2.16</b>	4.7	0.831	1.69
2	"Conservation Education, gift and scholarship	32	<b>1.28</b>	3.3	0.584	1.19
3	"Ecosystem services; Erosion and flood control	32	<b>0.906</b>	3.19	0.563	1.15
4	"Empowerment and provision of alternative source of livelihood	32	<b>1.41</b>	4.24	0.75	1.53
5	"Gift from Tourists and staff of the PA"	32	<b>0.719</b>	2.83	0.5	1.02
6	"Intrinsic value, Tourism, International linkage	32	<b>2.91</b>	5.31	0.939	1.92
7	"Provision of Employment but inadequate"	32	<b>2.53</b>	5.19	0.918	1.87
8	"Provision of Fuel-Efficient Stove "	32	<b>2.31</b>	4.58	0.81	1.65
9	"Provision of Borehole"	32	<b>0.75</b>	3.05	0.539	1.1
10	"Provision of some social amenities in the past 20 years	32	<b>3.22</b>	5.86	1.04	2.11



**Figure 3.** Solution to the negative socio-ecological impacts of Yankari game Reserve as expressed by sixteen communities surrounding the Reserve.

**Table 3.** Solution to the negative socio-ecological impacts as expressed by sixteen communities surrounding the Reserve.

s/n	Solution to the negative Impacts	n	mean	sd	se	ci
1	"Allow for collection of non-timber products"	32	<b>0.75</b>	2.83	0.5	1.02
2	"Compensation for damage crops and death of livestock "	32	<b>1.56</b>	4.33	0.765	1.56
3	"Deploy modern technology to keep wildlife from straying inside the reserve	32	<b>1.12</b>	3	0.531	1.08
4	"Effective communication forum between community and management	32	<b>0.938</b>	3.13	0.553	1.13
5	"Employ of indigenous people "	32	<b>5.53</b>	7.37	1.3	2.66
6	"Empowerment and provision of alternative livelihood"	32	<b>2.22</b>	5.51	0.973	1.98
7	"Establish Ranger station to ward-off criminals."	32	<b>0.5</b>	2.21	0.391	0.798
8	"Establish dispute resolving committee "	32	<b>1.5</b>	3.57	0.63	1.29
9	"Increase rangers to secure reserve"	32	<b>0.5</b>	1.68	0.298	0.607
10	"Make concession to increase farmlands"	32	<b>0.562</b>	2.5	0.442	0.902
11	"Prevent grazing and access of herders into the reserve"	32	<b>1.53</b>	4.15	0.734	1.5
12	"Provision of social amenities"	32	<b>4.91</b>	6.84	1.21	2.47
13	"Sustained conservation education"	32	<b>1.09</b>	3.48	0.615	1.25