



Existing Challenges: *Plantation Development versus Wildlife Conservation in the Omo-Tama-Mago Complex*

Reported by :Ato Cherie Enawgaw, Ato Derbe Deksios and Ato Girma Timer

Ethiopian Wildlife Conservation Authority

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1. Introduction

The lower Omo Valley of Southern Nation Nationalities and People Regional State (SNNPRS) is one of the last unspoiled wilderness biodiversity hotspot areas located in the southwest Ethiopia. Wildlife protected areas (WPAs) in the area include: Omo, Mago National Parks, Tama and Chelbi Wildlife Reserves, Murule and Welishet Sala Controlled Hunting Areas. These WPAs are mutually dependent mega-biodiversity complex in the area and home for diverse conservational important species of mammals, avian, reptiles and insects. The area was proposed primarily to protect the terrific biodiversity and the complex natural ecosystems and key larger mammal including the African Elephants Buffalo, elands and others. Currently, the WPAs in the lower Omo valley are under greater conservational problems and the wildlife populations and their natural habitats have been negatively affected by a combination of human activities including cattle grazing and poaching (illegal hunting) and seasonal settlement. .

The situation may become more serious due to the development of kuraz sugar cane development project, which is one of the biggest development plans considered in the five years GTP of the country. However, It is the stands of the Government that the expected negative impacts of the project activities on the distribution, movement and habitat requirement of wildlife harbor in the these linked WPAs (Omo-Tama-Mago complex) must always be managed carefully.

Although, the sugar cane development project is expected to bring considerable change on the local livelihood and for the growth of national economy, no clear information on the impact of the envisaged project on wildlife resources of the valley plus sound EIA not yet finalized.

To investigate the existing realities a team organized from the Federal Wildlife Conservation Authority and the SNNPRS culture and Tourism Bureau went down and conducts survey on the project sites and made discussions with concerned people so as to pave a road for possible win-win solutions for both the wildlife conservation and the success of the planned development project.

2. OBJECTIVE

General objective: To observe the planned sugar cane project locations in relation with the boundaries and wildlife resources of the WPAs (Omo and Mago National Parks and Tama Wildlife Reserve) and discuss with relevant stakeholders about the development project so as to insure sustainable development in the lower Omo area.

Specific objectives

- ✓ To distinguish the actual project location map of the project and its relation with wildlife resources of the area,
- ✓ To understand the major activities of the project which will have adverse impacts on the wildlife resources of the park,
- ✓ Conduct ground observation in and around Omo and Mago National Parks and Tama wildlife reserve
- ✓ To understand distribution movement and habitat uses of wildlife around Omo and Mago and Tama landscape
- ✓ To find out possible recommendations useful for wildlife conservation and the planned development projects

3. Methodology

Materials required during the field assessment include: Geographic Positioning System (GPS), binoculars, photo and video camera, field guide books for both birds and mammals and topographic maps were employed to understand and collect the required information so as to achieve the said objectives.

Methods: The field work had been conducted by vehicles and some time in each of the WPAs (namely, Omo, Mago National Parks and Tama wildlife reserve) on foot. It has been possible to cover and observe all the sensitive areas that have direct contact with planned kuraz sugar cane development project. The Wildlife situation was also seen in all the core areas of the parks and the reserve. Discussion was conducted with sugar cane development projects at Addis Ababa, Hawassa, Jinka and Hana (Salamago or project site) as well as concerned governmental bodies at Hawassa and Jinka and Omo and Mago

national Parks staffs. Plenary interview was conducted about the kuraz sugar cane development project, its location map and current and future development activities as well as the predictable impacts in the area. The team also consulted various reports about the lower Omo valley wildlife resources and the planned sugar cane development project. Presentation and further discussion was carried out with senior experts and invited guests at Ethiopian wildlife Conservation Authority so as to brainstorm for possible win-win solution.

4. The Omo-Tama-Mago mega biodiversity complex:

These three inter-linked wilderness areas are mutually dependent WPAs in the lower Omo valley of the SNNPRS of the country. The area would be under greater conservational problems coupled with the intended government sugar cane development project unless effective management measure taken to minimize the predictable impacts thereof.

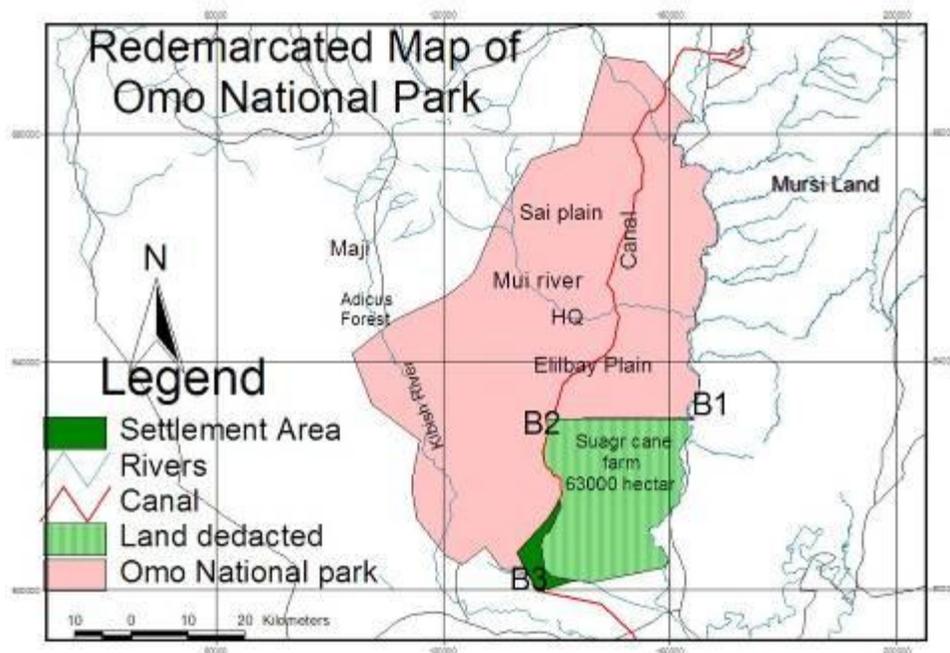
4.1. Omo National Park (ONP)

Omo National Park , which is one of the largest and biologically rich National Parks in Ethiopia, is located about 870km SW of Addis Ababa. The Vegetations composition includes savannah, riparian formation and deciduous woodland. So far 325 species of birds and 75 species of mammals have been recorded in the park. Eland, cheetah, elephant, black rhino, giraffe, buffalo, lion, leopard, lelwel hartebeest, tiang, Oryx, Burchell's zebra, Lesser kudu, de-Brazzas monkey, common baboon and gurezaare the major mammalian species found in the park. The park was established in 1968 as a proposed National Park covering a total of 4068km². The park was re-demarcated by the regional government with sound participation of local communities, Wereda, Zone and Region concerned officials in 2005. The re-demarcation process had considered recent local communities settlement and resources uses, current wild animals distribution, movement and habitat requirement. However, the park had not got legal status soon after the re-demarcation process and continued as a proposed National park until the end of 2002. Later on, at the end of 2002, the regional government had started selection of land suitable for the planned sugar cane development project in the area. The project demands about 150,000ht of suitable land for the planned sugar cane plantation. Reports for the region shows that efforts were employed to minimize the impacts of the project on the wildlife resources of the park during the selection of suitable cultivation land in the area.

Accordingly, the regional government conducted boundary re-demarcation considering core wildlife habitats and corridors and the land needed for the planned sugar cane development project. Based on this both the Omo and Mago National parks secure legal demarcated boundary by 2003 by the SNNPRS. The

south east part of the park land which covers 63000ht excluded and the total area of ONP become 3438 km².

Although the excluded land is wet season home range for some larger mammals, it is highly threatened by grazing pressure, settlement and poaching of Nagngatom people. Thus, the south east part of the park below illiby plain excluded from the park for the sugar cane development project.

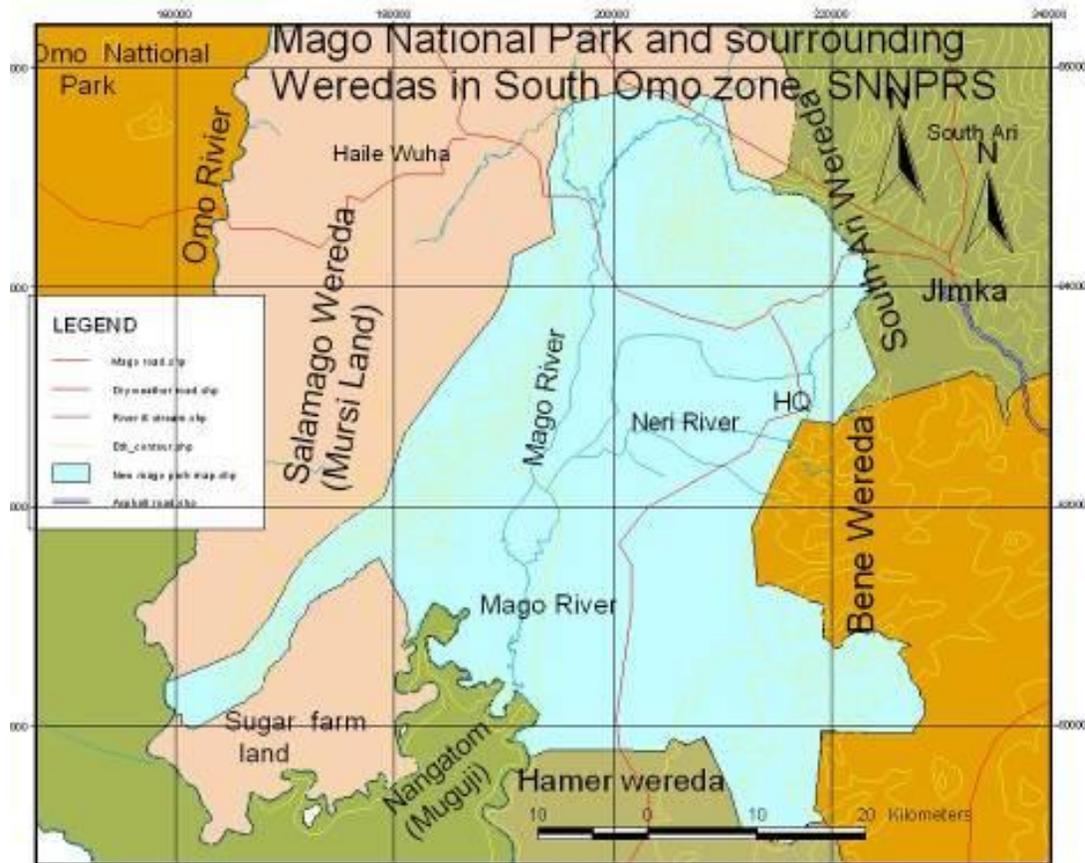


4.2. Mago National Park(MNP)

MNP lies on the eastern sides of a small branch of the eastern Rift Valley (Omo depression), in the Debub Omo Zone of SNNPRS and located about 530 and 800 km SW of Hawassa and Addis Ababa, respectively. The Park supports a typical bush savanna fauna with 81 larger mammals and 237 species of bird. Among mammals: African elephant, buffalo, lesser-kudu, greater-kudu, duiker, warthog, tiang, lewel's hartebeests, Oryx, grant's gazelle, gerenuk, giraffe, cheetah, wild dog, lions, leopards, gureza, common baboon and verevt monkey are common and conspicuous. The MNP was established in 1970 as a proposed National Park. Similar to the Omo the MNP was also re-demarcated considering the recent local communities' settlement and resources uses, wild animals' distribution, movement and habitat as well as the intended kuraz sugar cane development project in the area.

The re-demarcated park boundary had secured legal status in 2003 by the SNNPRS. The total area of Mago National Park becomes 3438 km². About 30000ht of the SW part of the park land excluded from

the MNP and included to the sugar cane development project.



4.3. Tama Wildlife Reserve

Tama wildlife reserve was established together with MNP in 1970. It is one of the WPAs in Debub Omo Zone located in between or adjacent to Omo and Mago National Parks.

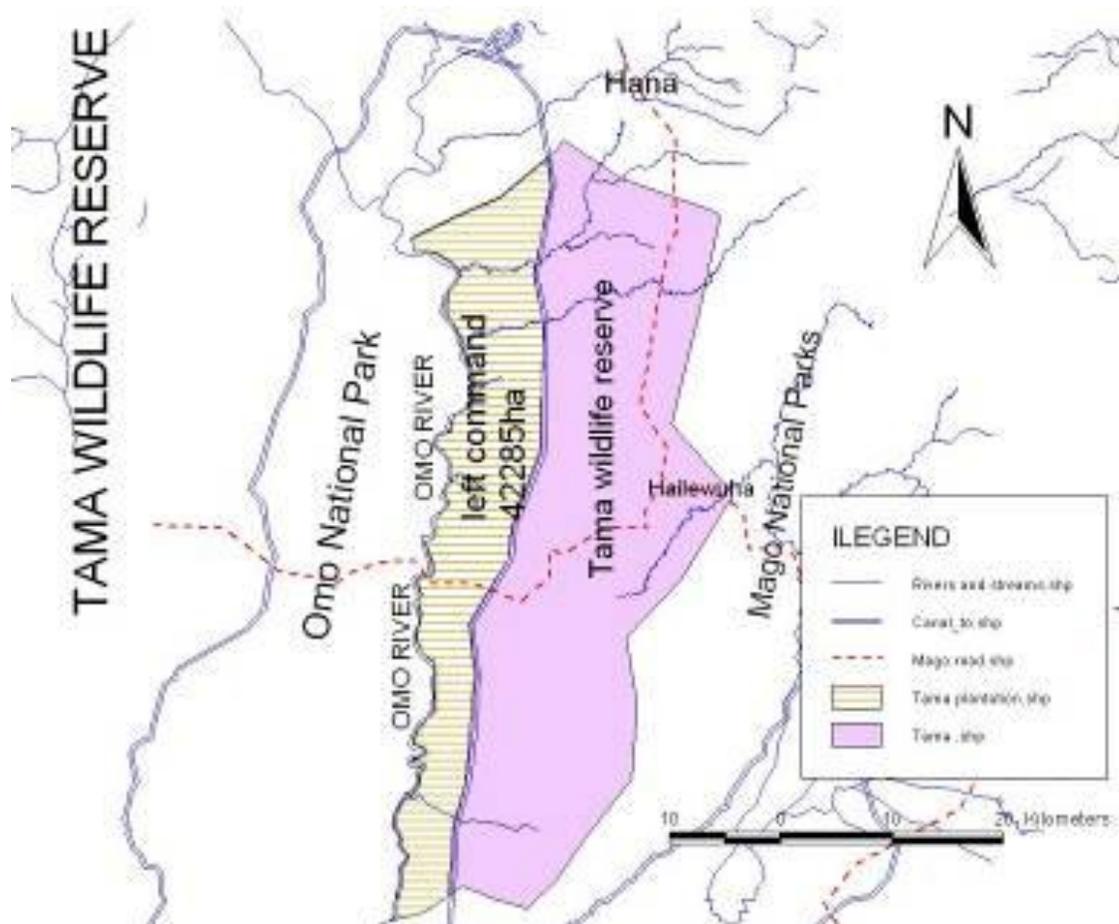
The reserve is very rich in wildlife resources besides large number of wild animals migrate into this area from the neighboring WPAs based on seasons. It is one of the dry season's refugees for the wildlife of the nearby WPAs. And, it is suitable home for the remnant giraffe population. Savannah, riparian formation and deciduous woodland constitute the major vegetation types of the reserve.

Although systematic ecological study have not been conducted so far to determine the diversity and abundance of flora or fauna in the area, almost all mammals and birds species recorded from both Omo and Mago national Park known to exist in the reserve. Common mammals species of the reserve includes: cheetah, elephant, giraffe, buffalo, lion, leopard, lelwel hartebeest, tiang, oryx, Burchell's zebra,

Lesser kudu, de Brazzas monkey, common baboon and gureza, ostrich on the plains and the endemic black-winged love bird are among others typical features of the reserve. However the reserve is more disturbed compared to the OMO and Mago national parks. In 2008, the reserve was re-demarcated by the involvement of local communities, Wereda, Zone and Region and federal concerned officials. The total area of the reserve was about 1472km². Presently about 42285ha of the left bank Omo River excluded from the tama reserve for the intended sugarcane plantation.

The Tama wildlife reserve has would totally lose its natural connection with the Omo River and Omo National Park and all area to the left bank of Omo River is proposed as the command plantation and sugar factory zones by the sugar cane development project. Unfortunately the importance of wildlife corridors and the movement of larger mammals (key species like elephant) were not taken into consideration during the selection of plantation site in the area.

About 42285ht of land were selected and considered as one of the command plantation area. It is imperative to establish key corrodors to maintain natural key animals movement especially Elephants movement. Some area needed to be re-considered and live aside for animal movement from the command area.



4.4. Kuraz Sugar cane project

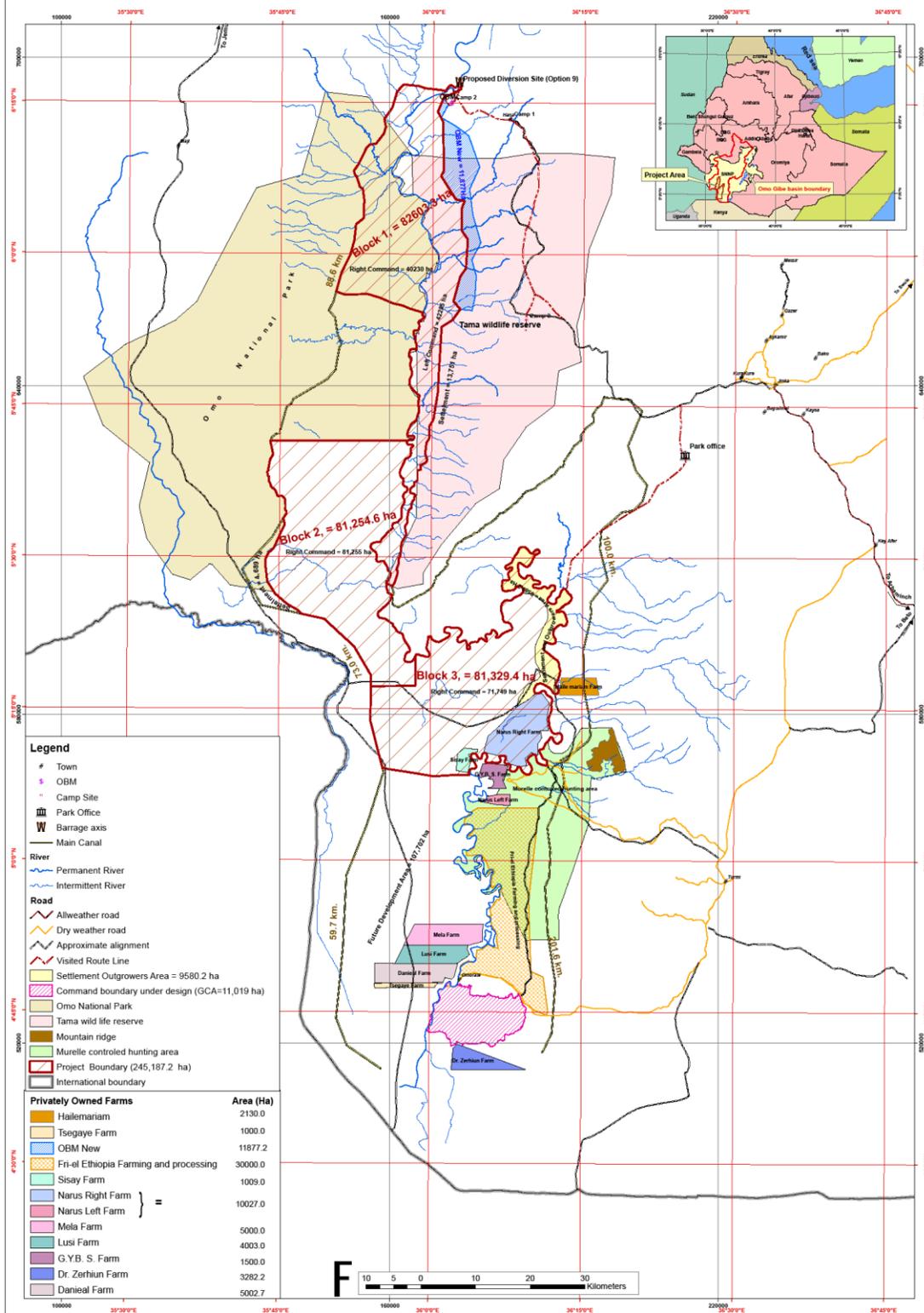
The Ethiopian Sugar Development Agency has launched a large scale sugar development scheme called Kuraz sugarcane development project in Debub Omo Zone, Southern Nation Nationalities and People Regional State (SNNPRS). The first phase has started with the preparation of the land earmarked for the sites of the future factories and plantations. The project comprises the construction of six sugar factories, sugar cane plantations, housing units, and roads.

The Omo Kuraz Sugar Factories Project forms part of the government's five-year GTP plans to increase sugar production in the country. The current annual sugar consumption (i.e. above 500,000 ton) is much greater than the actual production (i.e about 300,000 ton). As a result about 150,000 tons of sugar has been imported annually to fulfill the domestic sugar requirement. Government has planned to increase the sugar production to 2.3 million tones by the end of 2014/15. According to the GTP, the project would be very important to address the domestic sugar demand gap as well as to export the remaining to secure foreign currency for the country. .

The SNNPRS and Debub Omo Zone have already prepared about 150,000ha of suitable land for the kuraz sugar cane development project. The study and design of Omo Kuraz Sugar Factories Project has been done at a cost of 118.3 million Birr by the state owned Ethiopian Waterworks Design and Supervision Enterprise (EWDSE) in collaboration with the Southern Ethiopia Design and Supervision Enterprise (SEDSE), which will have a 40 percent share in the project (Ato Tamirat personal com.).

The government has earmarked 225 million dollars for each of the six sugar factories that will be constructed by the Metal and Engineering Corp (MetEC) in the area. The project would create huge employment opportunities for the local community. The six sugar factories and plantations in the zone are expected to create more than 150,000 fulltime and part-time jobs opportunities. It is also planned to consider community development components in which local people will be directly benefited by having separate irrigation land to enable them to earn a living from their own irrigation agriculture. Accordingly, Bodi, Murssi, Menit as well as Nyangatom communities will be directly beneficial from the project. Construction of villages for employees, more than 750km internal roads, six sugar factories, one bridge over Omo River and more than 200 km canal and development of plantation will be executed by the project in the area

Location Map of the Project Area



5. Major findings

Discussions were conducted with relevant stakeholders, including sugarcane development officials at Awasa, Mursi Hana and Addis Ababa to find out the realities on the envisaged project activities in the valley.

1. Sugar cane development project officials, Hawassa:

Q1. Is the Information released via internet about the location map of Kuraz sugar cane development project true?

Sugarcane development project officials at Awasa confirmed that the Sai plain/Northern Part of Omo National Park considered as a command area (plantation area) in the project as indicated on the map. According to officials, they are still conducting EIA in all of the project area so as to identify the predictable problems in all of the project area. They also mentioned the possibility of excluding Sai plain from command area as far it is important core area of the wildlife and ready to work with the relevant bodies (federal EWCA, Region BOCT and national parks managing agencies) so as to minimize impacts of the project on the distribution, movement and habitat uses of the wildlife resources.

Q2. What are the major activities planned to undertake in the area which may have significant impacts on wildlife resources of the area? What are the actual activities underway at present in the area?

The project officials' working at Hawassa and Addis Ababa as well as managers at the project sites (Hana), has informed us the project is under study and no practical work so far has been in progress. They added the project will be implemented step by step and the first phase of plantation may start from the north part of Tama plain east of the Omo River.

Q3. What are the major activities planned in the area ?

- The project comprises the construction of six sugar factories, sugar cane plantations, housing units, village, canals and roads.
- About 150000ht of natural land will be converted to sugarcane plantation,
- Construction of one bridge over Omo river,
- Construction of about 250km long canal on both side of omo river i.e from north to the south and the conal crosses all the WPAs (OMO, MAGO and TAMA).

- Construction of about 750km internal road and 132km main road from Jinka to the project. The latter is under construction.
- EIA work is in progress by the project (by water works and design enterprise based at Addis Ababa).

6. Significance of the Omo-tama Mago complex

The lower Omo Valley is unique in the world

- it is one of the nine UNESCO world heritage sites (Archeological and Paleontological sites) comprises four main geological formations, namely the Mursi, Shungura, Usno; and the much younger Kibish Formation.
- it is one of the last unspoiled and biodiversity hotspots region in Africa
- the Omo-Tama-Mago biodiversity complex is mutually dependent and interlinked Wildlife Protected Areas It conserves an outstanding biodiversity of the country, which also plays a significant role in insuring adaptive capacity of the country to the impacts of climate change.
- It contributes to improve the alternative livelihood options of the local people. the direct use values includes but not limited to wild food, medicinal plants, pasture and subsistence hunting through consumptive uses, and generating income through various tourism activities.
- The indirect use values of the Park come through its ecological and environmental services, aesthetic, cultural and spiritual values.
- There are sixteen different nationalities that have there own culture, language, norm and lifestyle
- The area is very sensitive and it is the resources of all people in the world.
- Generally the area would have important in terms of biodiversity conservation (ecological), tourism and recreations, scientific research and education, social and economic value

Therefore, any developmental activities in this area need to be done and managed very carefully. A mitigation measure must be developed to reduce and minimize the negative impacts identified by conducting proper EIA. These mitigation measures possibly established through legal or best practice standards.

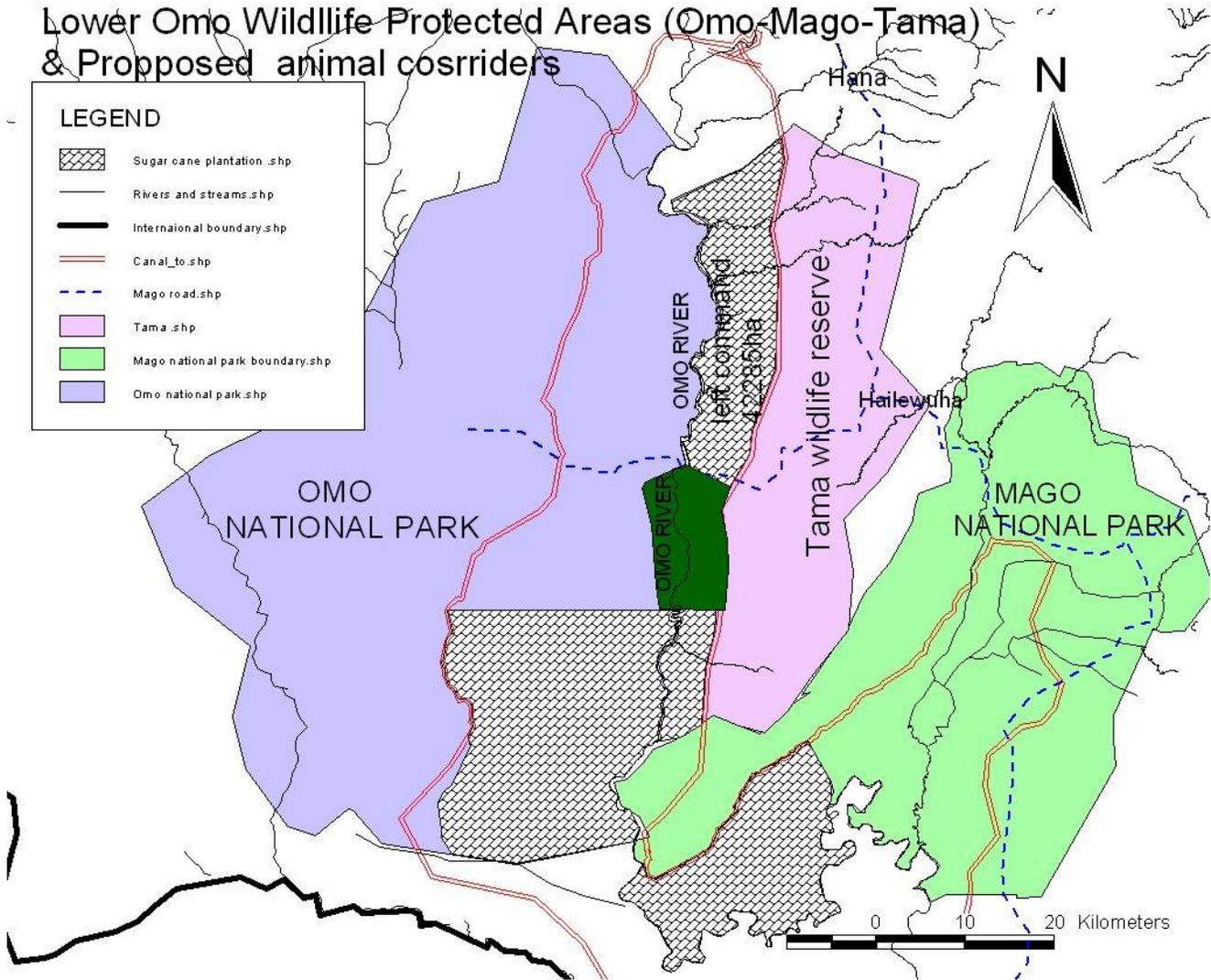
7. The Kuraz Sugar cane Development project

- The Project is part of the five-year GTP plans of the country aimed to increase sugar production
- It is one of government large scale sugar development scheme operated in the lower Omo valley of Debub Omo Zone, SNNPRS.
- Preparation of 150,000ha of suitable land earmarked (factories and plantations)
- The project comprises the construction of six sugar factories, sugar cane plantations, housing units, village, canals and roads.
- The current annual sugar consumption (i.e. above 500,000 ton) is much greater than the actual production (i.e about 300,000 ton)
- The plan is to increase sugar production to 2.3 million tones by 2014/15 so as to address the domestic sugar demand and for export and secure more foreign currency
- The study and design of the Project handled at a cost of 118.3 million Birr by the EWDSE (federal level) in collaboration with the SEDSE (SNNPRS)
- The government has earmarked 225 million dollars for each of the six sugar factories and the plantations and the six sugar factories together expected to create huge employment opportunities for the local community i.e more than 150,000 fulltime and part-time jobs opportunities.
- It is also planned to consider community development components i.e separate irrigation land will be allocated for the communities living in the area. Accordingly; Body, Murssi, Menit as well as Nangatom communities will be directly benefited.

8. The way forward

- ✓ Although open canal is relatively cheaper it would be dangerous for the wild animals' movement and distribution. Therefore, based on proper EIA and the mitigation measure identified thereof closed/covered canal would be essential at least for some selected core wildlife area and corridors to sustain seasonal wildlife movement and distribution.
- ✓ The northern part of the park area (Sai plain) is one of the core wildlife area particularly for elephants, buffalo, Giraffee eland, tiang, and other game animals and thus need to be always protected as part of the park.
- ✓ The possibility of revising the park boundary and expansion towards the south west direction (that is Ethiopian and Sudan boundary) would be very important to compensate the lost park land and to protect wildlife corridors.
- ✓ The EIA should critically investigate the socioeconomic impact of the project, including the potential impact of local communities on protected areas and the possible human wildlife conflict mitigation measures.
- ✓ Integrated development should be considered in which strong attention need to be given for the conservation of wildlife resources alongside with the planed sugar cane development project.
- ✓ Undertake some kind of consultative meeting /workshop/ regarding the lower Omo valley area wildlife and world heritage sites and the planed sugar cane development projects with key and relevant stakeholders so as to create awareness and common understanding.
- ✓ Establish Mursi-Body community based conservation area as soon as possible to ensure the future survival of Tama Wildlife.
- ✓ Establish wildlife corridors to interconnect the Omo-tam and Mago protected areas that ensure seasonal wildlife movement and distribution.
- ✓ The project should work closely with protected areas managing agencies and local authorities towards improving local livelihood, to reduce human wildlife conflict in the landscape as well as in selecting sites for the envisaged six sugar factories and establishment of industry villages
- ✓ The following map would be possible proposed tentative sketch which require further ground investigation. The map indicate possible wildlife corridors between Omo-Tama-Mago protected

areas, the Sai plain is core wildlife habitat of Omo National Park, Great care need to be taken for Omo riverine vegetation.



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