Project Update: May 2017

Local community capacity strengthening training on wetland based alternative livelihoods

To avoid wetland conversion to other land use types and drainage, we have provided 1-day training to community on wetland-based alternative livelihood strategies. The training participants were drawn from the community; wetland users, farmers who have land adjacent to wetland habitats, community leaders and students. Through this training was about 62 community members were addressed (Figure 1 a-c). Wetland based livelihood strategies such as:

- The values and importance of the wetland to the human and ecosystem?
  - ✓ Flood control.
  - ✓ Assistance in climate change (drought) resilience.

- How can community be involved in wetland conservation?

- How can local community be part and parcel of wetlands restoration and conservation?

- What are the sustainable farming activities that can be implemented in the wetland?
  - ✓ Fish rearing.
  - ✓ Wetland is source of water for livestock in dry season.
  - ✓ Bee keeping in buffer zones.
  - ✓ Fruit trees planting in buffer zone.

- Other alternative livelihoods that promotes wetlands conservation and ensures protection of local culture?
  - ✓ Cutting grass (papyrus) for different uses.
  - ✓ City park development.

Figure 1a. Group photo of school leader after training on wetland based alternative livelihoods for community

Figure 1b: Group photo of school leader after training on wetland based alternative livelihoods for community. Figure 1c: Group photo of community leaders after training on wetland based alternative livelihoods for community

1. Capacity building at environment and nature conservation clubs

In two schools, we have provide training to over 70 club members (teachers and students) to strengthen their capacity for delivering well organized execution of conservation education programmes in the community (**Error! Reference source not found.**). The training addressed the following topics.

- The values and importance of the wetland to the human and ecosystem?
- How school involvement in wetland conservation?
- What are the sustainable farming activities that can be implemented in the wetland?
- What are the roles of students in protecting wetlands?
- How can the students be part and parcel of wetlands restoration and conservation?

- Alternative livelihoods that promotes wetlands conservation and ensures protection of local culture?

Figure 2. Photo while students attending the training

In addition to training on the above mentioned topics, other efforts made to strengthen environment and nature conservation clubs leader in managing the club, inspiring members to participate in conservation efforts, and identification of conservation activities (Figure 4**: Nature conservation club office at Kachama School**).

As per activity plan the project, office was built from local materials in one school compound (**Error! Reference source not found.**) and the construction in other school is under way.

Figure 2: Training for club members teachers

Figure 4: Nature conservation club office at Kachama School

After training schools nature conservation club members at Jitu school started practical activities in the school compound and outside school. For example, students started preparing bed and growing different ornamental trees, and flowers in school compounds (**Figure 3Figure 3: when students are participating in bed preparation to plants in front of their class.**).

Figure 3: when students are participating in bed preparation to plants in front of their class.

2. Field assessment of crane and livestock pressure on wetland habitat

In order to properly undertake field monitoring we have selected one person from each project site for this activity. To encourage nature conservation club student's participation in the project activities we gave this chance first for nature conservation club members at each site. Then, one interested student from each was found and they have been participating in the field work. Before students start the field activities, detailed training was given to them on data collection checklist and they have signed agreement with the project to collect the data as per the checklist (**Figure 4**).


Figure 4: while providing orientation on how to collect data on cranes in the field

Field monitoring results (December 2016 - April 2017)

As the dry period extends crane population in one of the breeding site (Boye) was decreased over 50% whereas in Kacama the breeding pair was moving to croplands, and other small wetlands /swampy situated nearby area for feeding (**Figure 5**). But, we didn't find any clue where some of the cranes at Boye were go during pick drought season.

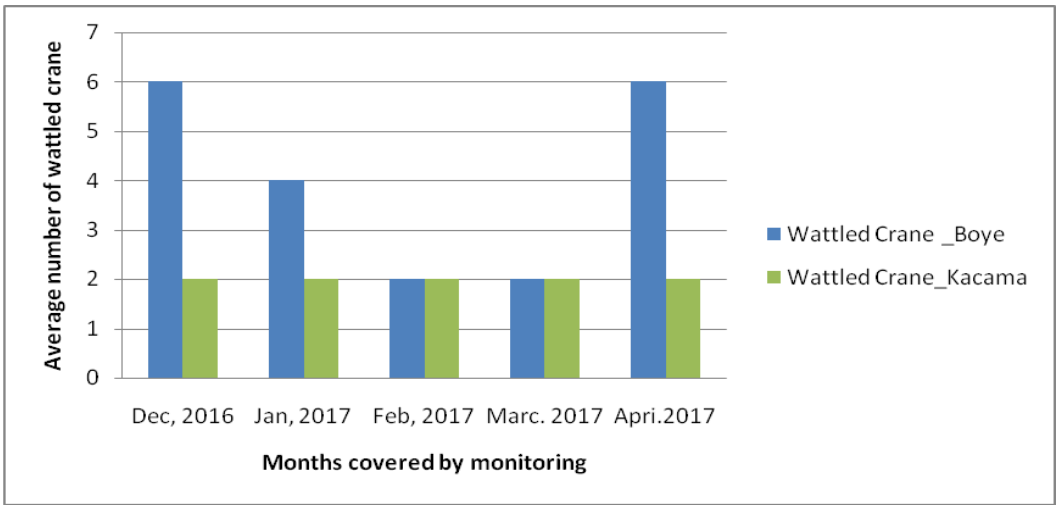


Figure 5: Crane monitoring result since from 2016-April 2017

The possible causes for this is increase in livestock and human pressure on wetlands in dry season because in Ethiopia wetlands are open public resource and exploited by community without any rules that control extent and types of use. As a result, in dry season the population of livestock graze on wetlands becomes very high as compared to rainy season (**Figure 6**). Because, livestock didn't find any grass and forages at upland at pick dry seasons in the project area (**Figure 7**).

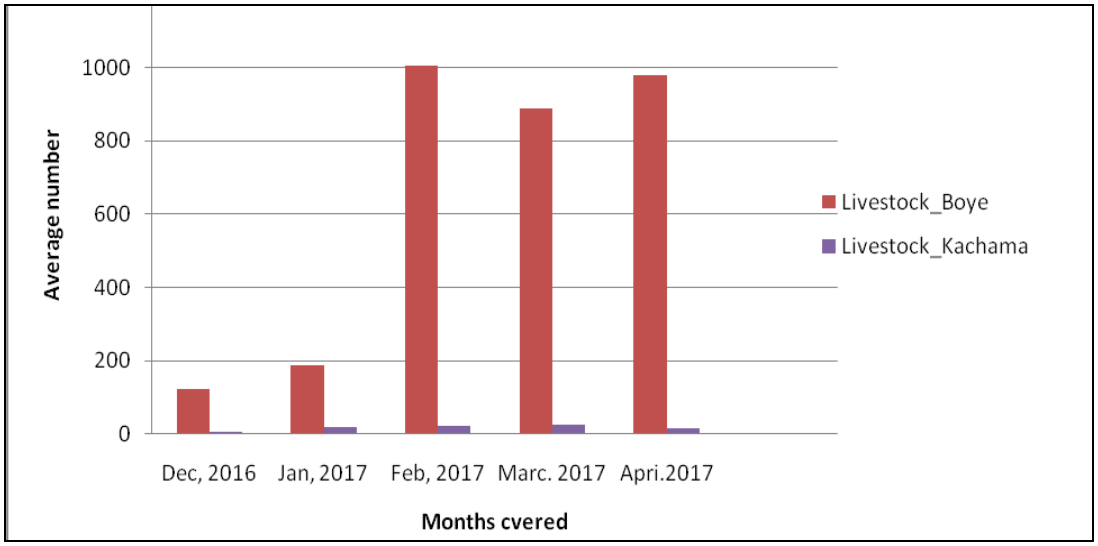
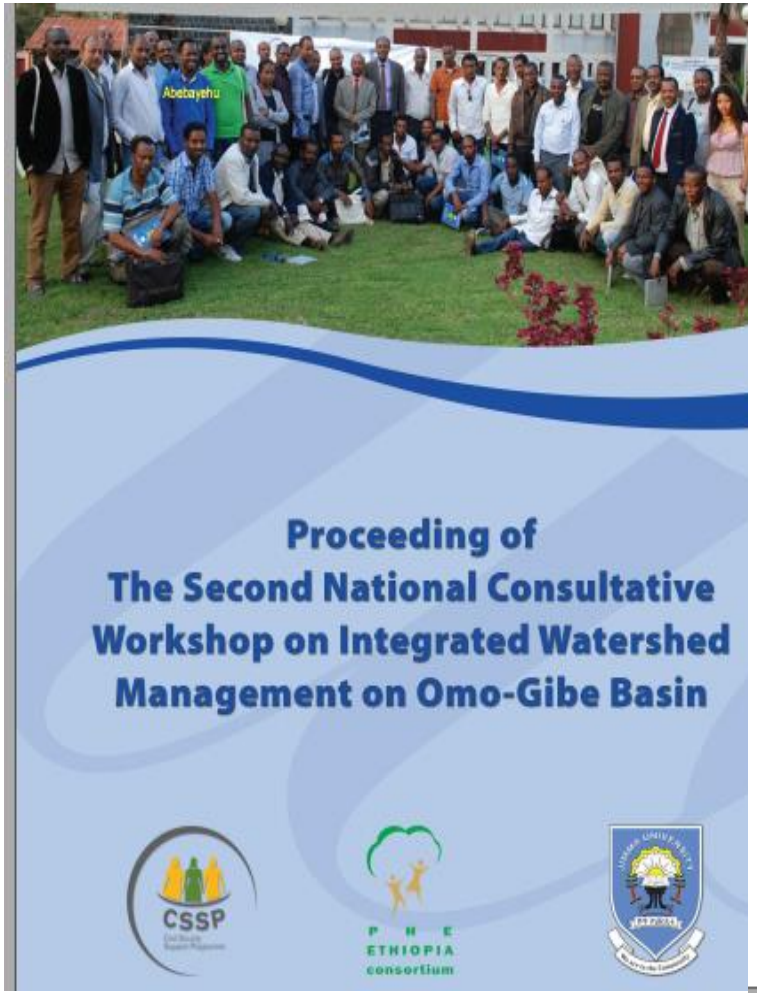


Figure 6: Crane monitoring result since from 2016-April 2017

Figure 7: The average number of livestock population grazing wetlands at crane breeding site

Publication of workshop presentation by Abebayehu Aticho on Crane habitat or wetland conservation roles to address environmental, economic and social issues



2.4.3 Review on the Roles of Wetlands in Sustainable Watershed Management

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Abebayehu Aticho stated that in the past several decades, wetlands are considered as wastelands & breeding sites of malaria. Thus, wetland deranges and conversion to other land use type is highly appreciated in many parts of the world. Globally professionals consistently argued that wetlands are "Kidneys of the earth" which purifies water and detoxifies wastes by their special filtering capacity. In Ethiopia, it was estimated that the wetlands are available in various regions with the highest proportion in Gambela region (7.73%) and the least proportion in Tigray region (0.16%) (Table 2).

Table 2 Distribution and proportion of wetlands in Ethiopia

Regions	Total area (ha)	Wetlands %
Gambella	3,203,280	7.73
Amhara	15,764,744	2.74
SNNPRS	11,064,200	1.38
Afar	9,526,567	1.38
Oromiya	35,961,996	1.11
Somali	29,151,596	0.86
B.S/Gumuz	5,033,592	0.45
Tigray	5,085,784	0.16

Wetlands give several environmental services including socio-economic services, water supply, retaining biodiversity, recreation and education, and siltation control. Managing the wetlands can help to minimize the erosion problem upstream position and the siltation problem in downstream areas. The proportion of wetlands is very high in the GG catchment. Hence, there is huge opportunity to minimize the sediment load towards the dam by managing the wetlands in the catchment.