

COUNTY GOVERNMENT OF BUNGOMA



MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES, IRRIGATION & COOPERATIVE DEVELOPMENT
Office of the County Executive Committee Member

Telephone: -
Mobile: 0722563841
E-mail: monicahfedha@yahoo.co.uk
cecmagriculture@bungoma.go.ke

County Kilimo House
Next to Kenya Seed
P.O. Box 437-50200

BUNGOMA
DATE: 2TH MAY, 2023

REF: BGM/CG-CECM/MOALF&C/CA. MEET/VOL.I

THE CLERK,
COUNTY ASSEMBLY
BUNGOMA

Dear Sir,

RE: ADDITIONAL RESPONSE ON MAGEMO DAM

The above subject refers.

Following your letter Ref: BCA/ADM/6 VOL. III/ (60), and a subsequent communication Ref: BCA/CC/SECT/2VOL.II (17) dated 17th APRIL 2023 on Magemo dam, we hereby submit additional response as follows:

The area under irrigation and drainage in Bungoma is approximately 400Ha and 1500Ha respectively spread across the county. Several irrigation schemes do exist though there is need for improvement. They include Kamusinga/Kamtiong, Chepkuy, and Chepkarai/Chepkutuny. Drainage projects developed for crop production include Sitila/Nalondo, Siritanyi and Matisi. Individual farmers do carry out small scale irrigation along water bodies. Several dams and water pans have been identified for construction and rehabilitation to enhance water storage for irrigated agriculture. More investment is therefore required to develop irrigation infrastructure, technology transfer and extension services (Draft CIDP. 2023-2027)

Several issues were raised on Magemo dam and were responded to as outlined below on the floor of the house.

For Circulation to Members
[Signature]
13/6/2023

Issue no. 1:

Why the department has neglected the said Dam posing a risk to human life and other environmental and health risks to the residents of Ndivisi Ward:

Response:

Bungoma County has more than 85 dams spread across the county. An assessment of the dams has found that most of the dams have silted and are in dire need of rehabilitation to serve the intended objectives and avoid being a risk to the respective residents

Magemo dam is one of the largest dams in the County with a capacity of over 100,000 M³ of water. The dam has a huge potential for irrigation and fisheries development as well as recreation. In spite of the Dam being an important resource, it has been neglected because the local leadership and the community have not given it priority while choosing projects to be funded by the County Government, just like in the case of the other dams and water pans across the County.

Issue no. 2:

The reasons as to why there has been little effort to rehabilitate the dam

Response:

Owing to its large capacity, it falls under the Department of water. This is because the department of Irrigation which is under the County Ministry of Agriculture, Livestock, Fisheries, Irrigation and Cooperatives is only allowed to rehabilitate water pans and small dams of capacity of less than 20,000 M³. Additionally, it is estimated that the dam will require Ksh, 75 M for effective rehabilitation. This amount is enormous and hence requires proper planning and resource mobilization similar to what happened to Kabkara Dam which is being rehabilitated by the National Agriculture and Rural Inclusive and Growth Project (NARIGP).

Issue no. 3: The steps the Executive is taking to implement the recommendations of PAC/PIC report in respect of rehabilitation of the said dam done in Financial Year 2014/15.

Response:

The issue of the said report and its implementation can only be clarified by the County Secretary who was there at the said time, and the implementation committee of the first County Assembly. This is because the implementation of the reports has a time frame and is depended on the due diligence that is done by the Executive on issues raised in PIC/PAC reports. This is more so in cases where the PIC/PAC reports of the County Assembly are not based on Auditor General's reports.

Issue no.4: What the department is doing to have the dam repaired in a better manner

Response:

The department in its planning framework, the Draft Sectoral plan 2023-2032 and the draft County Integrated Development Plan (CIDP) 2023-2027, has planned to rehabilitate dams across the

County to increase water storage capacity and availability for increased agricultural and fisheries productivity. It is also recommended that the Dam can be rehabilitated in phases due to limited funds that are allocated to the department. The Department of Water can also be requested to plan and budget for the rehabilitation of the Magemo Dam.

Additional Response

According to the Hansard official report of Tuesday, 4th April members sought further clarifications and I hereby respond as follows:

1. Hon Mukhanya reiterated that the community residing near the dam are willing to support the government in ensuring that the dam is rehabilitated. The speaker ruled that his were comments and not questions.
2. Hon. Milliah Masungu : In response to her question, only Magemo dam has been earmarked for rehabilitation in the 2023/24 Financial Year. Under NARIGP two dams have been constructed/rehabilitated; Kabkara at a cost of Ksh. 50M and Wabukhonyi in Siboti Ward at a cost of Ksh. 25M. The issue of dams being a risk to people's life can be solved by a concerted effort between the community and the government, so that government fences the dams while the community to adhere to their obligations of ensuring that those who have access to the dams are cautioned about the lurking danger.
3. Hon. Wambulwa suggested that Emergency Fund be utilized to repair the dam. This option was considered in light of the seriousness of this issue, but the challenge is that the PFMA stipulates what emergencies are.
4. Hon. Meshack: Raised the issue of people dying by drowning in the dam. He made it clear that the rehabilitation of the dam should be prioritized and money should be allocated
5. Hon. Kikechi suggested that since the dam requires Khsh. 75M, it can be rehabilitated in phases
6. Hon Ali Machani: The dam should be budgeted for by the department. This has been done in the forward budget of 2023/2024 FY.
7. Hon. Mukhongo asked for dams that had been captured in the CIDP. The position is, there was generalization with no list of dams.
8. Hon Ken Wanyama reiterated that it is important to prioritize projects and implement in phases
9. Hon. Isaiah Sudi raised the issue of networking with National Government because Ksh. 75M needed for the dam is little money. He said many dams had silted yet they were sitting on large pieces of land. The water in the dams can be used by the communities
10. Hon. Nangulu advised that the Agriculture Ministry writes proposals for the dams to be handled by National Government
11. Hon. Edwin Opwora hinted that some dams like Mt. Elgon, Nabuyole and Namasanda. Had been identified for construction under National Government. A background check found that only the identification was done but pre-feasibility studies are yet to be carried out
12. Hon. Chemion suggested that funds be allocated to this dam by Agriculture department since the CEF has low allocation. It can be done in phases
13. Hon. Caleb Wanjala wanted to know if funds have been previously allocated to Magemo dam. The answer is yes, from Irrigation department. We have no records of fingerlings taken to Magemo dam. I was not able to find the records at the time of compiling this report

14. Hon. Job Mukoyandali asked that an inventory of all dams in the county be done and documented (Attached is the list of 65 out of the over 87 dams in the County. Inventorization of the dams is on-going).
15. Hon. Violet Makhanu gave an advice about the way forward which included visiting the dan and having a work plan on how it should be rehabilitated

Way forward/Implementation framework

1. The Department has allocated Ksh. 12M on Magemo dam in the 2023/24 Financial year.
2. A public participation barasa to be held with all key stakeholders coming on board to prepare a work plan for the dam in July
3. Survey, Design and preparation of Bills of Quantities for the dam on going
4. Tender advertisement, evaluation, award of tender, site hand over to the successful bidder.

Thank you



Hon. Monicah Salano Fedha

County Executive Committee Member

Agriculture, Livestock, Fisheries, Irrigation & Cooperative Development

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF BUNGOMA



IDENTIFICATION AND STATUS ASSESSMENT OF DAMS AND WATER PANS IN BUNGOMA COUNTY

DRAFT REPORT 2023.

PREPARED BY

CHECKED BY

EXECUTIVE SUMMARY

This report seeks to identify, and carry out a preliminary assessment of, all the dams and water pans in the entire county.

It also identifies the physical location of each of the dams in terms of Sub-County, Ward and Geographical Positioning System coordinates. The report also endeavors to establish the dam land sizes in hectares and find out whether or not there exist management committees as well as the economic viability of each particular dam.

In this report, it is envisaged that conclusions would be drawn and recommendations made for a viable way forward.

The following is a summary of the findings:-

- (i) That there are 73 dams/pans in the county.
- (ii) That they varied from 0.3 ha to 13 ha in land size.
- (iii) That virtually all dams have been encroached by neighboring farmers.
- (iv) That most dams did not have management committees in place and where there were committees they were quite inactive.
- (v) That vandalism and destruction of the auxiliary facilities such as cattle drinking troughs, community water points and toilets/bathrooms, as well as fences was found to be rampant.
- (vi) That the long rains experienced in the county had a toll on the dams, some dams had their embankments damaged, spillways swept away and an increase in dam siltation.

IDENTIFICATION AND STATUS ASSESSMENT OF SMALL DAMS AND WATER PANS IN THE COUNTY.

S/No	S/County Ward	Name of dam	GPS Location	Size (Ha)	Presence of committee	Dam Status	Proposed interventions	Approx Cost of Rehabilitation Kshs	Economic viability
1	Bumula S/County Bumula Ward	Khayo	N00°04.505' E034°24.557' Elevation 1234 m.a.s.l	0.8	Yes	-Concrete embankment in place -Earthen side embankment stable -Siltling up -Spillway partially done -Fence partially done -Sanitation facilities in place but vandalized -Encroachment evident	-Excavation to remove silt -Complete fencing of whole dam area -Rehabilitation of sanitation facilities -Complete construction of spillway	5M	-Fish farming -Tree nursery establishment -Green house irrigation
2	Bumula S/County West Bukusu Ward	Namuningie	N00°38.003' E034°27.206 Elevation 1417 m.a.s.l	11.4	Yes	-Dam recently rehabilitated by LVNSB -Earthen side embankment stable -Siltling up -Spillway eroding backwards	-Excavation to remove silt -Complete fencing whole dam area -Construct sanitation facilities	7M	

		1414 m.a.s.l			-No community water point -Dam silting up -Encroachment evident -Embankment is stable	-Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet	-Green house irrigation -Bee keeping -Recreation -Ecotourism
--	--	--------------	--	--	--	--	---

S/No	S/County Ward	Name of dam	GPS Location	Size (Ha)	Presence of Mgt Committee	Dam Status	Proposed interventions	App rox. cost of Rehabilitation on Kshs	Economic viability
6	Bumula S/County Siboti Ward	Nangili	N00°39.343 E034°28.357 Elevation 1391 m.a.s.l	5.5	No	-Spillway eroded -Dam silting up -Encroachment evident -Embankment is broken -No fence and auxiliary facilities	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point and toilet/bathroom -Construct cattle drinking trough.	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
7	Bumula S/County Siboti Ward	Kisawayi	N00°39.979 E034°26.795 Elevation 1303 m.a.s.l	6.7	Yes	-Spillway eroded -Toilet in place -Draw off system to the cattle trough and	-Perimeter concrete fencing required	4M	-Fish farming -Tree nursery establishment

						community water point failed -Dam silting up -Encroachment evident -Embankment is stable	-Excavate to remove silt -Repair spillway -Construct community water point and cattle trough draw off system -Need for EIA		-Green house irrigation -Bee keeping -Recreation -Ecotourism
8	Siboti/West B	Wabukhonyi				Under rehabilitation			
9	Sirisia S/County Kulisiru South Malakisi Ward	Bukokholo	N00°41.364 E034°27.816 Elevation 1359m.a.s.l	3.15	No	-Spillway eroded -No community auxiliary facilities -Dam silting up -Encroachment evident -Embankment requires repair	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet -Need for EIA to be done	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
10	Sirisia S/County Kulisiru South Malakisi Ward	Butonge	N00°42.58 E034°28.584 Elevation 1377 m.a.s.l	2.6	Yes	-Concrete fence around water body -Spillway eroding -Toilet good -Community water point seen -Dam silting up -Encroachment evident -Embankment is stable -Cattle drinking trough not in good condition -Gully developing downstream	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Do minor repairs to cattle trough -Gulley needs to be healed	12M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

11	Sirisia S/County Kulisiru South Malakisi Ward	Tembua	N00°43.327 E034°28.839 Elevation 1474 m.a.s.l	0.3	Yes	-Pan completely silted -Spillway eroded -Encroachment evident -Not fenced -Serious sand harvesting taking place in the pan	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet	2M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
----	---	--------	--	-----	-----	---	--	----	---

12	Sirisia S/County Kulisiru South Malakisi ward	Namawanga /Bisunu	N00°42.403' E034°30.518' Elevation 1465 m.a.s.l	0.8	No	-Spillway destroyed -Embankment broken -Dam silting up -Water draw off system not in working condition -Cattle trough seen but not working	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point and toilet -Repair water draw off system -Repair embankment	4M	-Fish farming -Tree nursery establishment -Green house irrigation. -Bee keeping
13	Sirisia S/County Kulisiru South Malakisi Ward	Bitonge	N00°44.205' E034°29.900' Elevation 1580 m.a.s.l	1.6	No	-Cattle trough seen but not working -Spillway eroded -Dam silting up -Embankment is stable -Encroachment evident	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point and toilet -An EIA required	2M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
14	Sirisia S/County Kulisiru South Malakisi Ward	Sirisia	N00°45.057' E034°30.373' Elevation 1541 m.a.s.l	6	No	-Cattle trough dilapidated -Spillway eroded -No community sanitation facility seen -No community water point -Dam silting up -Embankment is unstable -Encroachment evident	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet. -Repair embankment -Form management committee	8M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

15	Sirisia S/County Nammwela Ward	Menu	N00°46.517' E034°32.050' Elevation 1600 m.a.s.l	0.4	No	-Completely silted -Concrete spillway broken -No sanitation facilities seen	-Repair draw off system -Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point,cattle trough and toilet. -Repair embankment -Form management committee -Repair draw off system	3M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
16	Sirisia S/County Nammwela Ward	Mulinda	N00°47.756' E034°21.233' Elevation 1440 m.a.s.l	Not verif ied	No	-Recently done by national government -Spillway eroded -No community sanitation facility seen -No community water point	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point,cattle trough and toilet -Repair embankment -Form management committee -Repair draw off system -EIA be done	1M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
17	Sirisia S/County Lwandanyi Ward	Wamono		Not verif ied	No	-Dam completely silted up and heavily encroached	-An EIA be done -Need for construction of new dam -Form management committee	3M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
18	Sirisia S/County Lwandanyi Ward	Kabkara	N00°45.89' E034°24.724' Elevation 1349 m.a.s.l	11	Yes	-Spillway eroded and formed gully -No community sanitation facility. -No community water point	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Repair embankment -Heal the gully	9M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping

						<ul style="list-style-type: none"> -Dam silted -Embankment eroding -Encroachment evident 		<ul style="list-style-type: none"> -Recreation -Ecotourism
--	--	--	--	--	--	---	--	--

19	Sirisia S/County Nammwela Ward	Nammwela CRF	N00°45.308' E034°33.506' Elevation 1632 m.a.s.l	2	No	<ul style="list-style-type: none"> -Being managed by CRF management -Fenced water body -It is silting -Embankment stable --Community water point seen 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Form management committee 	1M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
20	Sirisia S/County Nammwela Ward	Mutonyi	N00°45.383' E034°32.66' Elevation 1622 m.a.s.l	13.6	Yes	<ul style="list-style-type: none"> -Cattle trough dilapidated -Spillway eroded -No community sanitation facility seen -No community water point -Dam silting up -Embankment is unstable -Encroachment evident -Green house sited and being run by CBO 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet -Repair embankment -Strengthen management committee -Repair draw off system 	7M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
21	Sirisia S/County Nammwela Ward	Nabumukoya	N00°44.37' E034°32.179' Elevation	11	Yes	<ul style="list-style-type: none"> -Cattle trough dilapidated -Spillway eroded 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt 	7M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment

			1621 m.a.s.l			<ul style="list-style-type: none"> -Community sanitation facility seen -No community water point -Dam silting up -Embankment is unstable -Encroachment evident -CBO doing fish farming, Green house, Tree nursery and bee keeping. 	<ul style="list-style-type: none"> -Repair spillway -Construct community water point, cattle trough and toilet -Repair embankment -Form management committee -Repair draw off system -Need for EIA 		<ul style="list-style-type: none"> -Green house irrigation -Bee keeping -Recreation -Ecotourism
22	Kanduyi S/County West Sang'alo Ward	Kisochele	N00°33.005' E034°64.9' Elevation 1397 m.a.s.l	0.8	Yes	<ul style="list-style-type: none"> -Concrete embankment broken -Sanitation facilities destroyed -Encroachment evident -Dam completely silted 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet -Repair embankment -Repair draw off system -EIA be carried out 	4M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
23	Kanduyi S/County Musikoma Ward	Namasanda	N00°31.54° E034°32.607° Elevation 1378 m.a.s.l	6.4	Yes	<ul style="list-style-type: none"> -Water body fenced -Stable embankment -Spillway eroding away -Auxiliary facilities have been vandalized -Dam land encroached -Siltling 	<ul style="list-style-type: none"> -Perimeter fencing required --Excavate to remove silt -Repair spillway -Repair community water point, cattle trough and toilet -Repair embankment -Repair draw off system 	6M	<ul style="list-style-type: none"> -fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
24	Kanduyi S/County Tuuti/Marakaru Ward	Mayanja	N00° 38.722' E034° 30.938' Elevation 1480 m.a.s.l	Not verified	Yes	<ul style="list-style-type: none"> -Water body fenced with wooden posts -Stable embankment -Spillway eroding away -Auxiliary facilities vandalized 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway 	4M	<ul style="list-style-type: none"> -fish farming -Tree nursery establishment -Green house irrigation -Bee keeping

						<ul style="list-style-type: none"> -Dam land encroached on -Dam silting 	<ul style="list-style-type: none"> -Repair community water point, cattle trough and toilet -Repair embankment -Repair draw off system -Do an EIA 		
--	--	--	--	--	--	---	--	--	--

25	Kandyi S/County Tuuti/Marakaru Ward	Khalaba "B"	N00° 39.56' E034° 31.94' Elevation 1452 m.a.s.l	16	Yes	<ul style="list-style-type: none"> -Spillway eroded and gully formed -Auxiliary facilities totally destroyed -Dam completely silted -Scouts movement allocated some 4.4 ha for their activities -Not fenced 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway -Repair community auxiliary facilities -Repair embankment -Repair draw off system -Do an EIA 	40M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
26	Kabuchai S/County Nalondo Ward	Muyayi	N00° 38.92' E034° 34.199' Elevation 1512 m.a.s.l	6	Yes	<ul style="list-style-type: none"> -No fence -Stable embankment -Spillway eroding away -Auxiliary facilities working -Dam land encroached on -Dam silting 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway -Repair embankment -Do an EIA 	7M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
27	Kabuchai S/County Chwele/Kabuchai Ward	Khalaba "A"	N00° 41.7' E034° 34.235' Elevation 1537 m.a.s.l	11.2	Yes	<ul style="list-style-type: none"> -Spillway destroyed -Embankment eroded -Dam silted -Encroachment evident 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway 	6M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment

						-No auxiliary facilities seen	-Construct community water point, cattle trough and toilet -Repair embankment -Repair draw off system -Do an EIA		-Green house irrigation -Bee keeping -Recreation -Ecotourism
--	--	--	--	--	--	-------------------------------	---	--	---

28	Kabuchai S/County Chwele/Kabuchai Ward	Wabukhonyi	N00° 43.902' E034°34.788' Elevation 1515 m.a.s.l	Not verified	No	-Not fenced -Stable embankment -Spillway good -Auxiliary facilities owned by Lake Basin Development Authority which was allocated part of the dam and it runs fish farming -Kenya forest service runs a tree nursery -Dam land encroached on -Dam silting	-Perimeter fencing requested -Excavate to remove silt -Form a management committee -Carry out an EIA	3M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
29	Kabuchai S/County Chwele/Kabuchai Ward	Chwele	N00° 44.958' E034°34.343' Elevation 1575 m.a.s.l	14.8	Yes	-Eroded embankment -Spillway eroding away -Auxiliary facilities have been vandalized -Dam land encroached on	-Perimeter fencing required -Excavate to remove silt -Repair spillway	6M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping

						-Dam silting -Dam not fenced	-Repair community water point, cattle trough and toilet -Repair embankment -Repair draw off system -Carry out an EIA		-Recreation -Ecotourism
30	Kabuchai S/County Chwele/Kabuchai Ward	Muyundo	N00° 45.204' E034°33.808' Elevation 1612 m.a.s.l	3.14	Yes	-Water body fenced with wooden posts -Stable embankment -Spillway eroding away -Auxiliary facilities are working -Dam land encroached on -Dam silting	-Perimeter fencing required -Excavate to remove silt -Repair spillway trough and toilet -Repair embankment -Construct community water point -Carry out an EIA	1.5M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

31	Kabuchai S/County Chwele/Kabuchai Ward	Makhonge	N00° 45.438' E034° 34.79° Elevation 1670 m.a.s.l	1.2	No	-Desilting done manually -Encroachment evident	-Construct the dam anew with all the auxiliary facilities to be put in place -An EIA be done	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
32	Webuye West S/County Misikhu Ward	Bilongo	N00° 38.6' E034°45.974' Elevation 1670 m.a.s.l	Not verified	Yes	-Water body fenced -Stable embankment though leaking a bit -Auxiliary facilities in place -Dam land encroached on -Dam silting	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Repair leakage in the embankment -Carry out an EIA	1M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping

33	Webuye West S/County Misikhu Ward	Misikhu "A"	N00° 43.047' E034°44.748' Elevation 1613 m.a.s.l	2.4	Yes	-Water body fenced with wooden posts -Embankment not stable -Spillway eroding away -Auxiliary facilities have been vandalized -Dam land encroached on -Dam silting	-Perimeter fencing required -Excavate to remove silt -Repair spillway -Repair community water point, cattle trough and toilet -Repair embankment -Repair draw off system -Carry out an EIA	5M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
34	Webuye West S/County Misikhu Ward	Misikhu "B"	N00° 43.203' E034°44.908' Elevation 1641 m.a.s.l	2.4	Yes	-Recently constructed by National Government -Water cannot reach the cattle trough -Spillway eroding -Encroachment evident	-Perimeter fencing required -Repair spillway -Repair and grass embankment -Repair draw off system -Strengthen the management committee -Carry out an EIA	0.5M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

35	Kimilili S/County Kimilili Ward	Matili	N00° 45.136' E034°43.718' Elevation 1660 m.a.s.l	7	Yes	-Erosion on the embankment -Spillway washed away -Not fenced -No auxiliary facilities -Dam silting -Dam encroached on	-Perimeter fencing required -Repair spillway -Excavate to remove silt -Construct community water point, cattle trough and toilet -Repair and ram embankment -Repair draw off system -Carry out an EIA	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
36	Kimilili S/County Kimilili Ward	Lutoryi	N00° 46.713' E034°42.304' Elevation 1675 m.a.s.l	5.5	Yes	-Erosion on the embankment -Spillway washed away	-Perimeter fencing required -Excavate to remove silt -Repair spillway	10M	-Fish farming -Tree nursery establishment

						<ul style="list-style-type: none"> -Not fenced -No auxiliary facilities -Dam silting -Dam land encroached on -CBO carrying out horticulture and tree nursery 	<ul style="list-style-type: none"> -Construct community water point, cattle trough and toilet -Repair and ram embankment -Repair draw off system -Strengthen the management committee -Carry out an EIA 		<ul style="list-style-type: none"> -Green house irrigation -Bee keeping -Recreation -Ecotourism
37	Kimilili S/County Kibingei Ward	Chebukwabi	N00° 47.828' E034°39.724' Elevation 1636 m.a.s.l	6	Yes	<ul style="list-style-type: none"> -Stable embankment -Spillway grassed -Not fenced -No auxiliary facilities -Dam silting -Dam encroached on 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet -Repair and ram embankment -Repair draw off system -Strengthen the management committee -Carry out an EIA 	5M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

38	Webuye East S/County Ndivisi Ward	Magemo	N00° 42.543' E034° 45.872' Elevation 1625 m.a.s.l	13	Yes	<ul style="list-style-type: none"> -Erosion on the embankment -Spillway washed away -Fence vandalized -Auxiliary facilities vandalized -Dam silting -Dam land encroached on 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway -Repair community water point, cattle trough and toilet -Carry out an EIA -Strengthen management committee 	30M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
39	Webuye East S/County Mihuu Ward	Sirende	N00° 40.298' E034° 45.286' Elevation	1	Yes	<ul style="list-style-type: none"> -Erosion on the spillway -Embankment stable 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway 	10M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment

			1622 m.a.s.l			<ul style="list-style-type: none"> -Spillway washed away -Not fenced -No auxiliary facilities -Dam silting -Dam encroached on 	<ul style="list-style-type: none"> -Construct community water point, cattle trough and toilet -Repair draw off system -Carry out an EIA 		<ul style="list-style-type: none"> -Green house irrigation -Bee keeping -Recreation -Ecotourism
40	Webuye East S/County Ndivisi Ward	Wabukhonyi	N00° 44.543' E034° 47.55' Elevation 1600 m.a.s.l	2.4	Yes	<ul style="list-style-type: none"> -Recently rehabilitated by National Government -Erosion on the embankment as it settles -Spillway eroding away -Not fenced -No auxiliary facilities -Dam silting -Dam encroached on 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair spillway -Construct community water point, cattle trough and toilet -Repair and ram embankment -Repair draw off system -Carry out an EIA -Strengthen management committee 	3M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

41	MT Elgon S/County Elgon Ward	Labaa	N00° 52.511' E034° 43.489' Elevation 2052 m.a.s.l	Not verified	Yes	<ul style="list-style-type: none"> -Concrete embankment -Auxiliary facilities seen though sited poorly due to terrain -Dam silting -Dam land encroached on 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Repair and ram embankment -Repair draw off system -Carry out an EIA 	5M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
42	Tongaren S/County Mbakalo Ward	Lutukai (karima)	N00° 42.764' E034° 50.592' Elevation 1574 m.a.s.l	2.8	No	<ul style="list-style-type: none"> -Not fenced -No auxiliary facilities -Dam completely silted up -Dam encroached on 	<ul style="list-style-type: none"> -Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet 	10M	<ul style="list-style-type: none"> -Fish farming -Tree nursery establishment -Green house irrigation

						-Sand mining taking place	-Form and train management committee -Carry out an EIA	5M	-Bee keeping -Recreation -Ecotourism
43	Tongaren S/County Mbakalo Ward	Mukite	N00° 43.397' E034 52.11' Elevation 1658 m.a.s.l	1.6	No	-Not fenced -No auxiliary facilities -Embankment broken -Spillway in poor condition -Dam encroached on -Sand mining taking place	-Perimeter fencing required -Excavate to remove silt -Repair embankment and spillway -Construct community water point, cattle trough and toilet -Form and train management committee -Carry out an EIA		-Fish farming establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

44	Tongaren S/County Mbakalo Ward	Mmbakalo (Keyari)	N00° 44.059' E034°53.127' Elevation 1674 m.a.s.l	2	Yes	-Fenced water body -Auxiliary facilities seen -Dam silting up -Dam encroached on -Embankment broken and not stable -Spillway eroding away	-Perimeter fencing required -Excavate to remove silt -Repair the embankment and spillway -Strengthen the committee -Carry out an EIA	5M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
45	Tongaren S/County Mbakalo Ward	Kibisi	N00° 41.978' E034° 52.29' Elevation	2.6	Yes	-Not fenced -No auxiliary facilities -Dam silting up	-Perimeter fencing required -Excavate to remove silt	10M	-Fish farming -Tree nursery establishment

			1625 m.a.s.l			-Dam encroached on -Embankment broken and draining of the dam restrained by sand bags	-Construct community water point, cattle trough and toilet -Train management committee -Expand the dam -Protect the nearby springs -Construct a concrete embankment -Carry out an EIA		-Green house irrigation -Bee keeping -Recreation -Ecotourism
46	Tongaren S/County Milima Ward	Maliki	N00° 48.411' E034°49.352' Elevation 1670 m.a.s.l	4	No	-Currently the dam is sold to some individual who is doing farming	The farmer be evicted out of the dam plot and it be restored to its original use	25M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
47	Tongaren S/County Milima Ward	Bilibili	N00°47.072' E034°49.385' Elevation 1686 m.a.s.l	1.8	No	-Not fenced -No auxiliary facilities -Dam completely silted up -Dam encroached on -Bushy	-Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet -Form and train management committee -Reconstruct the dam -Carry out an EIA	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping

48	Tongaren S/County Milima Ward	Ambula	N00° 46.383' E034°49.652' Elevation 1680 m.a.s.l	Not verified	No	-Not fenced -No auxiliary facilities -Dam completely silted up -Dam encroached on -Bushy	-Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet -Form and train management committee -Carry out an EIA	25M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
49	Tongaren S/County Milima Ward	Welime (APIL)	N00°45.276' E034°49.433' Elevation 1630 m.a.s.l	Not verified	No	-Embankment eroded away -Not fenced -No auxiliary facilities -Dam completely silted up -Dam encroached on -Sand mining taking place	-Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet -Form and train management committee -Repair the embankment -Carry out an EIA	20M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping

50	Tongaren S/County Milima Ward	Maliki 'A'	N00° 47.952' E034° 49.886' Elevation 1716 m.a.s.l	Not verified	No	-Completely encroached on	-Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet -Form and train management committee -Carry out an EIA	25M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping
----	-------------------------------	------------	---	--------------	----	---------------------------	--	-----	---

51	Tongaren S/County Milima Ward	Lukhokhwe	N00° 49.426 E034° 50.505	Not verified	No	-Not fenced -No auxiliary facilities -Dam completely silted up -Dam encroached on	-Perimeter fencing required -Excavate to remove silt -Construct community water point, cattle trough and toilet -Form and train management committee -Carry out an EIA	15M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
52	Tongaren S/County Milima Ward	Nabing'enge	N00° 46.091' E034° 52.297' Elevation 1672 m.a.s.l	2	Yes	-Wooden posts fence -Auxiliary facilities seen -Dam recently rehabilitated -Dam encroached on	-Perimeter fencing required --Excavate to remove silt -Carry out an EIA	1M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism
53	Tongaren S/County Ndalu Ward	Kwa Rasto	N00° 50.028' E035° 00.446' Elevation 1797 m.a.s.l	Not verified	No	-Not fenced -No auxiliary facilities seen -Dam completely silted -Embankment converted to a road -Dam encroached on	-Perimeter fencing required --Excavate to remove silt -Construct auxiliary facilities -Construct a spillway -Carry out an EIA	20M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism

54	Tongaren S/County Soysambu/ Mituwa Ward	Makololwe	N00° 48.190' E035° 00.053' Elevation 1707 m.a.s.l	5.4	Yes	-Dam has silted -Embankment stable and used as road -No auxiliary facilities seen -Makololwe primary and secondary	-Perimeter fencing required -Excavate to remove silt -Construct auxiliary facilities -Strengthen the management committee -Carry out an EIA	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation
----	---	-----------	---	-----	-----	---	---	-----	--

61	Tongaren S/County Soysambu/Mitua Ward	Akola	N00° 78.687' E035 01.627' Elevation 1794 m.a.s.l	4	Yes	-Fence partially vandalized -Auxiliary facilities vandalized -Dam is silting up -Dam encroached on	-Carry out an EIA	5M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism		
62	Tongaren S/County Ndalu Ward	Ndalu (Kwa Chege)	N00° 82.059' E035° 0.254' Elevation 1764 m.a.s.l	5	No	-Dam silted -Embankment destroyed -Not fenced -No auxiliary facilities -Dam encroached on	-Perimeter fencing required -Excavate to remove silt -Construct auxiliary facilities --Form and train management committee -Rehabilitate embankment -Carry out an EIA	10M	-Fish farming -Tree nursery establishment -Green house irrigation -Bee keeping -Recreation -Ecotourism		
63	Tongaren S/County Milima Ward	Kwa Area	N00° 78.278' E034°86.124' Elevation	5	No	-Dam silted -Embankment destroyed	-Perimeter fencing required -Excavate to remove silt	10M	-Fish farming -Tree nursery establishment		

		1687 m.a.s.l			-Not fenced -No auxiliary facilities -Dam encroached on	-Construct auxiliary facilities -Form and train management committee -Rehabilitate embankment -Carry out an EIA		-Green house irrigation -Bee keeping -Recreation -Ecotourism
--	--	--------------	--	--	---	--	--	---

Dams which were not accessed.

S/N	Name of Dam	Sub-County
1	Bitibo	Bumula
2	Napara	Bumula
3	Musole	Bumula
4	Manani	Bumula
5	Kitaban	Mt. Elgon
6	Sosio	Mt. Elgon
7	Matibo	Kabuchai
8	Okesi	Tongaren
9	Mwambu	Tongaren
10	Lunyu	Tongaren

CONCLUSION

Out of the foregoing preliminary investigations and assessment of the status of all dams within the county, the following conclusions were arrived at.

1. That virtually all the dams are silting up or have silted and the auxiliary facilities destroyed or have been vandalized
2. That the dam land has been encroached on by neighboring farmers
3. That most dams do not have active management committees
4. That the communities around these dams are ignorant of the economic potential that could be derived from the dams

5. That the team had limited time and resources to comprehensively cover issues underlying the state of the dams

RECOMMENDATIONS

1. The County Government or the Public/Private partners be identified to rehabilitate and develop the dams' economic potentials.
2. The County Government to engage the Survey department to carry out surveys to these dams with a view of establishing the boundaries and beaconing them hence discourage encroachment.
3. Detailed studies and designs be carried out to establish the exact costs of rehabilitation and setting up of economic activities.
4. Environmental and Social impact Assessment be carried out to all the dams.
5. The Management Committees to these dams be formed anew and be capacity built to enable them together with the communities, exploit the economic potentials around the dams by forming Common Interest Groups with a view to starting Income Generating Activities.
6. The National Government should partner with the County Government whenever they come down to rehabilitate dams in the County in order to facilitate continuity after they leave.
7. The 10No dams that were not reached, arrangements be put in place once the weather/roads have improved for accessibility.

ANNEXES.

ANNEX 1 : Contacts of local persons neighboring the dams whom the team interacted with and shared information on the dams visited.

SN	Name	Mobile Number	Name Of the Dam
1	Peter Wafula Bushuru		Namasanda
2	Tom Wangila	0713261460	Khalaba `B`
3	Cosmus Opuri	0705153334	Khalaba `B`
4	Vincent Khamila	0728429944	Kisochele
5	Enock Sitabuka	0714869796	Kisochele
6	Paul Khisa Waswa	0738441801	Chebukwabi
7	Peter Waswa		Chebukwabi
8	Patrick Watola	0702090118	Chwele
9	Francis Makari	0706878185	Chwele
10	Augustine Teka	079649501	Khalaba `A`
11	Wanyonyi Opicho		Makhonge
12	Lydia Nakiboli	c/o 0710729470	Makhonge
13	Zablon Wadukwa	0727555641	Muyundo
14	Amos Wafula Kituyi		Muyundo
15	Daniel Simiyu	0740072331	Nabumukoya
16	Jacob Chemugu	0713939781	Nabumukoya
17	Rodgers Malaba Sibulukhu	0713617953	Lutonyi
18	John	0700711412	Khayo
19	Moses	0703471094	Khayo
20	Kizito Wafula	0708473292	Namuningie
21	Duncan Walunyuwa	0718416053	Namuningie
22	Evans Barasa	0705322090	Namuningie
23	Kenneth Mauko	0715368123	Sitabicha
24	Crispinus Juma	0718636730	Sitabicha
25	Vincent Wafula Busuru	0706152583	Bosio
26	Bernard Wamalwa	0718552066	Bosio
27	Joseph Wangila Sikanga	0710213765	Kimwanga
28	Sylvester Wanambwa	0741820872	Nangili
29	Hussein Baraza	0728411118	Kisawai

30	Pius Wataka	0711607629	Kisawai
31	Timothy Chemiati	0700405669	Wamono
32	Khisa Wamoto	0718995488	Mulinda
33	Benson Wachemba	0798563161	Mulinda
34	Wycliff Nyongesa	0799821340	Sirisia
35	Issac Simiyu	0701675449	Bitonge
36	Levi Wekesa	0728835464	Bisunu
37	Johanes Muchanga	0791295472	Tembua
38	David Wanyonyi	0717299269	Sirende
39	Henry Munyolole	0710975140	Sirende
40	James Wanjala	0700815831	Lutukai
41	Richard Munyelele	0701905215	Mukite
42	Violet Namukuru	0715343177	Mukite
43	Patrick Barasa	0729378278	Kibisi
44	Dominic Simuyu	0707569386	Wabukhonyi
45	Vitalis Mandela	0701156906	Wabukhonyi
46	Zippy Isenye	0721869473	Maliki 'B'
47	Daniel Shitanda	0712298502	Bilbili
48	William Wanangwe	0710631732	Welime
49	Patrick Masika	0721228729	Makololwe
50	Wilson Masungu	0726573560	Makololwe
51	Daniel Wamalwa	0718705579	Matisi
52	Wilberforce Wanjala		Matisi
53	Isaac Emojong'	0726319659	Kabkara
54	Moses Wangila	0726069171	Butonge
55	MacDavid Wekesa	0712630258	Butonge

ANNEX 2 :

CONCEPT PAPER FOR FUNDING THE REHABILITATION OF SMALL DAMS AND WATER PANS IN BUNGOMA COUNTY.

1. PROJECT NAME

Proposed Rehabilitation of small dams and water pans in Bungoma County.

2. IMPLEMENTATION AGENCY

County Government of Bungoma and any other willing donor/partner

3. BACKGROUND INFORMATION.

Bungoma County has a total of 73 small dams and water pans that vary in sizes of between 0.3 Ha to 1.3 Ha. They have common challenges as found out by the task force that was appointed by the CECM for Agriculture, Livestock, Fisheries, Irrigation and Cooperative Development. Some of the challenges are :

- (i) Virtually all of them had been encroached on by neighbouring farmers.
- (ii) Some had Management Committees in place and yet others did not have.
- (iii) Some had CBOs running economic activities like Green House horticulture, tree nurseries, bee keeping, fish farming with minimal success.
- (iv) Some dams had been recently rehabilitated but cases of vandalism on the auxiliary facilities could be noted.
- (v) The long rain season that was experienced this year caused a lot of damage to embankments and spillways at the same time increasing silt into the dams and water pans.

It is with this in mind that this project proposal is being made so that if funded the challenges listed above can be mitigated.

4. PROJECT IMPACT

When the project is successfully implemented, it will make several people access water for both domestic and livestock use. It will also improve their nutritional status especially through fish and horticultural farming. The environment will also be improved if tree nurseries take root and people plant trees on their farms.

The introduction of ecotourism element will also play a big role in empowering the neighbouring communities economically through creation of employment.

5. PROJECT AREA AND PROPOSED ACTIVITIES

The project will focus on all the dams identified by the task force in the whole Bungoma County.

Most of the activities on these dams will entail:

- (i) Surveys to establish dam boundaries and pacing beacons and fencing so that encroachment is minimized.
- (ii) Carrying out environmental impact assessment in all the dams.
- (iii) Forming Dam Management Committees and training them to enable them manage the dams well.
- (iv) Carrying out detailed studies and designs with a view to rehabilitating the identified dams.
- (v) Carry out capacity buildings for communities around the dams so that they can form common interest groups that can start income generating activities

6. BENEFICIARIES

About 20000 farmers neighbouring the small dams are expected to benefit directly and indirectly from this project.

7. PROJECT STATUS

The task force was appointed by the CECM for Agriculture, Livestock, Fisheries, Irrigation and Cooperatives in May, 2018 and completed its task in July, 2018. (See the task force report for details of the dams' status)

8. PROJECT OBJECTIVES

The project will contribute towards increasing irrigated agriculture, fish farming, environment etc and ultimately poverty alleviation as outlined in Kenya Vision 2030, the Big Four Agenda and the County Integrated Development Plan.

9. PROJECT EXPECTED OUTPUTS

The project's expected outputs are:-

- (i) Feasibility studies, designs and preparation of tender documents for all the identified dams and water pans
- (ii) Environment and Social Impact Assessment for all identified dams and water pans
- (iii) Formation of dam management committees and train them
- (iv) Carry out capacity building for communities neighbouring the dams so that they start income generating activities.

10. PROJECT DURATION

This will depend on how soon the County Government of Bungoma and/or any willing donor/partner will avail the funds

11. ESTIMATED COST

As per the findings by the task force, the estimated cost of the project will be **Ksh575.5 Million**