EXAMPLE OF ANALYSIS OF SCORECARD EXTRACTION MATRIX

STRATEGIC COMMONS ORGANIZATION, REGENERATION AND ENHANCEMENT – COMMUNITY ANALYSIS OF REALITIES AND DYNAMICS (SCORECARD)

COMMUNITIES LIVING IN THE UPPER REACHES OF THE HEEN GANGA BASIN

	<1970	1970-1980	1980-2000	>2000	Overarching Observations and concerns if any	Possible Intervention if any
HG1. Demographics	HG1C1.1. Just 2 families in the 1950s and 13 in the 1960s. HG1C1.2. A larger number in Karambaketiya possibly from migration from the Hunnasgiriya side.	HG1C2.1. 40 families in Kaikawela HG1C2.2. 20 Families in Meemure HG1C2.3. Still the area had no real GNs but called Meemure	HG1C3.1. 5 GNs were created during the presidency of Premadasa HG1C3.2. More than 60 families	HG1C4.1. Gradual increase of population to number approximately 300 families by 2020 below Corbet's gap	HG1OC1. Migration in was upstream from original boundary of settlement at Dandeni Kumbura probably in the late 1940s or early 1950s so only LCs no ICs HG1OC2. Enforced stoppage of chena increased number of HHs HG1OC3. Migration out of 100 families left to educate children	INT1. Possible encouragement of out-migrating families to return if socioeconomic stability and development enhancement is visible as a long term plan or proven in the short term
HG2. Infrastructure	HG2C1.1. No clear community record but some infrastructure might have existed	HG2C2.1. Only dirt roads HG2C2.2. Bus from Hunnasgiriya approach only to Lulwatte HG2C2.3. Good transport via bullock carts HG2C2.4. Grama Niladharis had a 2-day trek to cover their areas HG2C2.5. Access to Dandeni Kumbura stopped resulting in fallow about 500 acres of paddy land falling fallow	HG1C3.1. People cleared and cut the road by early 1990 HG1C3.2. The Kiakawela bridge constructed HG1C3.3. Various politicians built small portions of the road and pocketed commissions HG1C3.4. Labor free or for a small fee from the community HG1C3.5. Pico-solar HH level by 1996	HG1C4.1. From 2000 onwards three small scale hydro plants (10-18KW) HG1C4.2. Grid connectivity in 2016 resulting in the abandonment of community energy generation projects but revisited for rehabilitation in 2021 HG1C4.3. Access road improved from Hunnasgiriya 2021 HG1C4.4. Bus service traversing the Heen Ganga area from Meemure to Ududumbara 2021 HG1C4.5. Mobile phone connectivity in 2021	HG2OC1. Kailawela bridge dilapidated and possible chance of a new bridge being built HG2OC2. Significant infrastructure enhancements during 2021 from President's "Gama Samaga Pilisandara" program	INT2. Completion of road network and the new bridge through direct state intervention INT3. Lobby to have the access road to Dandeni Kumbura rehabilitated to allow for the cultivation of those paddy lands and immediate improvement of the economic condition of the communities
HG3. Livelihoods Agriculture (Paddy)	HG3C1.1. No clear community record but some cultivation very probably by the few families living	HG3C2.1. About 500 acres including Dandeni Kumbura with 250 acres cultivated in both seasons	HG3C3.1. The failure of tea plantations saw a migration of estate labor to work in paddy fields and harvesting cardomoms from the forest	HGC4.1. From this time onwards, the amount of land under paddy has remained comparatively static HGC4.2. Increased HHs has put pressure on the land and may have reduced some land	HG3OC1. Opening up of Dandeni Kumbura road may be resisted by external groups that the villagers call "tunnel vision conservationists"	INT4. The rehabilitation of lands allowed to fall fallow through FD intervention can be rehabilitated or repurposed if

	in those areas at the time	and 250 during Maha HG3C2.2. Paddy varieties were H4, Taiwan, Hondarawaloo, with compost fertilizers. Self-grown seeds for paddy cultivation HG3C2.3. Community power was in the hands of those who had cattle. At the time, 300 bulls and 200 cows present HG3C2.4. Labor sharing, organic fertilizers applied using the Madu Flower HG3C2.5. Yield was 40 bushels of heirloom rice varieties	HG3C3.2. Seed paddy was obtained from external sources for the first time HG3C3.3. No significant use of agrochemicals HG3C3.4. Late 1980s FD intervened in Dandeni Kumbura and land under paddy dropped from 600 acres to 300 acres HG3C3.5. Number of cattle dropped to zero HG3C3.6. All families grew their own paddy	under paddy cultivation but this was not clearly affirmed	who cannot see the harmonization of the human-environmental interface and this sounds in line with GMSL thinking at least on the surface.	these areas are now grown over to either Guinea or Mana grass and is of no real use either as forestry areas or agro-economic areas
HG4. **Livelihoods Agriculture (Other)**	HG4C1.1. Sustainable chena cultivation was primary livelihood HG4C1.2. Evidence of natural growth observed from 1945 onwards	HG4C2.1. About 200 acres of Chena during this period HG4C2.2. Manifold advantages such as food sovereignty, prevention of animal intrusion into settlements, protection of upper watersheds HG4C2.3. Maha season, zero input, rain fed agriculture with a 9 year cycle	HG4C3.1. Chena cultivation forcibly stopped in 1988 HG4C3.2. Lands fall fallow creating enabling environment for proliferation of inimical wild animals HG4C3.3. Kalansuriya report was manipulatively used by FD to prevent utilization of forest resources by LCs HG4C3.4. People prevented from going into the forest for Kitul harvesting HG4C3.5. Pepper cultivation in earnest (including a variety by Kalansuriya) in early 1990s	HG4C4.1. Primary protection layer against wild animal intrusion gone with loss of chena cultivation. HG4C4.2. Intrusion of wild animals and insects such as Keedawa, pitimakuna, peacock, Torque Macaque, porcupines chief predators increase and the loss of scavengers such as jackals escalate problem. HG4C4.3. 60,000 Kg of Pepper sold each harvest to outsiders without any value addition so reduced income HG4C4.4. Kitul harvesting on homestead and settlement trees compromised with loss of harvest due to intrusion of termites HG4C4.5. About 300 wild kitul trees harvested (5-10 trees per	HG4OC1. Villagers frustrated by the breakages in sustainable practices and what they deem "terrorist type establishment and enforcement of reductionist agricultural practices with high toxin applications that has reduced community socioeconomic resilience	INT5. Rehabilitate community Kitul harvests, possibly lobby for ABS, explore cardomom cultivation in settlements by creating microhabitats and establish a pepper processing plant INT6. Attempt to significantly reduce agro-toxins through a weaning program to move gradually towards natural methods

			HG4C3.6. Desperate communities forced to espouse reductionist cultivation of beans, maize, wheat etc.	person) and those are disease free HG4C4.6. Reductionist practices have increased toxin levels with massive dozes of toxins applied to dry land (upland) crops such as beans		
HG5. **Livelihoods Other**				HG5C4.1. With primary agricultural livelihood related income compromised, villagers take advantage of fame through the movie Sooriya Arana to embark on tourism. HG5C4.2. Tourism uncontrolled to date and many guides lack sufficient skill and knowledge HG5C4.3. Returns for the village small with external entities extracting more than 50% of the profits of tourism HG5C4.4. Life saver group established	HG5OC1. While the primary tourism sale is "pristine environment", that environment is now in danger of damage and pollution due to the uncontrolled nature of tourism. HG5OC2. Villages very well aware but find themselves helpless due to the significant levels of external intrusion into these parts by various external parties.	INT7. Create a system to improve, Organize, legalize, standardize, familiarize and informatize tourism activities and overarch that approach with strong monitoring and evaluation conducted by the communities themselves through a self-governance mechanism.
HG6. **Water**	HG6C1.1. No real need to consider water as there were ample, clean, easily accessible water sources for the few families living in these areas	HG6C2.1. Drinking water from springs, streams and wells with ample supplies	HG6C3.1. Same as previous temporal segment	HG6C4.1. Community water projects and individuals establishing pipelines to springs become the main source of drinking water HG6C4.2. These exercises are unregulated, with water control and management non-existent resulting in each HH wasting about 15,000 – 25,000 liters of water per day HG6C4.3. The waste reduces water availability for agriculture and drinking for downstream communities HG6C4.4. Water pollution from tourism comparatively high	HG6OC1. Water has never ever been tested for either biological or chemical pollutants but suspected to be high at the present time in some water bodies HG6OC2. While technical expertize is available to reduce waste, it has never been used by the communities	INT8. A strong water management mechanisms through simple technological applications and high levels of awareness of optimizing shared commons such as the Heen ganga
HG7. **Cultural**	HG7C1.1. With the upstream migration from Dandeni Kumbura, a segment settled in Meemure and another in Kailawela. These two communities	HG7C2.1. Same as previous temporal segment HG7C2.2. Same as previous temporal segment	HG7C3.1. Prevention of chena cultivation significantly changes their culture and life patterns mostly towards the negative	HG7C4.1. Further damage to livelihood and lifestyles and significant heath and social problems experienced because of changes in agrarian practice HG7C4.2. Tourism further damages the internal social harmony		INT9. Difficult but possible resolution of caste related conflict within the area to ensure everyone works together towards

	belonged to different castes, their interaction was either minimal or confrontational, and, this social torque exists to this day. HG7C1.2. Communities lived in comparative harmony with nature, had almost no economic problems, had food sovereignty.			of the villagers with each HH or small cluster resorting to opportunistic and ultimately weak "business engagement" with external entities and tourists		optimizing the socioeconomic realities of the all communities living in the upper reaches of the Heen Ganga.
HG8. **Economic**	HG8C1.1. With the upstream migration from Dandeni Kumbura, a segment settled in Meemure and another in Kailawela. These two communities belonged to different castes, their interaction was either minimal or confrontational, and, this social torque exists to this day.	**HG8C2.1.** Similar to previous temporal segment	HG8C3.1. Economic strength dramatically reduced with loss of way of life and access to benefits of shared commons	HG8C4.1. Economic vulnerabilities increase and lack of financial surety due to loss of income from reductionist practices and rapid changes in income generation sources create a comparatively unsustainable economic landscape for the communities	Overarching all, Settlement level harmonization of economic/ environment/ community development and durable balance of the social/ natural/ cultural environment to optimize and sustain economic gains from their various livelihood activities through increased awareness and some external inputs would be the ultimate outcome	
HG9. **Environmental**	**HG9C1.1.** With the upstream migration from Dandeni Kumbura, a segment settled in Meemure and another in Kailawela. These two communities belonged to different castes, their interaction was either minimal or confrontational, and, this social torque exists to this day.	**HG9C2.1.** Similar to previous temporal segment	**HG9C3.1.** The first observations of illegal environmental activities that were unsustainable because they were done in secret and not subject to the holistic approach of history and primarily engaged in because communities did not believe that they were not stakeholders in shared commons despite FD and legal system preventing them from using those resources	**HG9C4.1.** Environment management compromised due to comparatively bad local practices and astigmatic activities of external activists **HG9C4.2.** Economic duress causes communities to engage in environment damaging short-term money making goals such as opportunistic and uncontrolled tourism increasing pollution of the environment	**HG9CO1.** Villagers seem to be keenly aware of the issues related to environment **HG9CO2.** Their vocal thoughts indicate that they fully endorse ABS at the community level	INT10. The Heen Ganga may be used as an ideal Segway to pushing the government to sign into the Nagoya protocol while sustainable management of environmental resources by the community itself is very possible here

SCORECARD FOR EACH OF THE POSSIBLE INTERVENTIONS BASED ON EXTRACTS, KPIs AND OPERATOR EXPERIENCE AND KNOWLEDGE

01. Encourage out-migrating families to return if socioeconomic stability and development enhancement is visible as a long term plan or proven in the short term													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**SCORE Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	2	3	Short Term	2	1	5.67	102	18 to 270	HG1C4.1 HG1OC1 HG1OC2	KPI-HG02	Operator conclusions during SCORECARD
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	3	2	Short Term	2	1	4.00	72	12 to 180	HG1C4.1 HG1OC1 HG1OC2		Operator conclusions during SCORECARD
					Middle Term	2	2						
					Long Term	2	3						
		Local government	3	1	Short Term	2	1	4.00	36	06 to 90			Research team, GMSL experiences
					Middle Term	2	2						
					Long Term	2	3						
		State	3	3	Short Term	2	1	4.00	108	18 to 270			Research team, GMSL experiences
					Middle Term	2	2						
					Long Term	2	3						
		External entities	2	2	Short Term	1	1	2.00	24	12 to 180		KPI-HG02	Research team, GMSL experiences
					Middle Term	1	2						
					Long Term	1	3						
Impact of intervention	3	Intracommunity	3	3	Short Term	2	1	4.00	108	18 to 270	HG1C4.1 HG1OC1 HG1OC2	KPI-HG02	Operator conclusions during SCORECARD
					Middle Term	2	2						
					Long Term	2	3						
		Intercommunity	3	2	Short Term	2	1	4.00	72	12 to 180	HG1C4.1 HG1OC1 HG1OC2		Operator conclusions during SCORECARD
					Middle Term	2	2						
					Long Term	2	3						
		Local government	3	1	Short Term	1	1	2.00	18	06 to 90	HG1C4.1 HG1OC1 HG1OC2		Research team, GMSL experiences
					Middle Term	1	2						
					Long Term	1	3						
		State	4	3	Short Term	2	1	4.00	144	18 to 270	HG1C4.1 HG1OC1 HG1OC2		Research team, GMSL experiences
					Middle Term	2	2						
					Long Term	2	3						
		External entities	1	2	Short Term	2	1	4.00	24	12 to 180	HG1C4.1 HG1OC1 HG1OC2	KPI-HG02	Research team, GMSL experiences
					Middle Term	2	2						
					Long Term	2	3						

Parameter	Weight	Value	Score
Sustainability of intervention	2	2	4
Cost of intervention	3	3	9

02. Lobby to have the access road to Dandeni Kumubura rehabilitated to allow for the cultivation of those paddy lands and immediate improvement of the economic condition of the communities													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**SCORE Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	2	3	Short Term	2	1	5.67	102	18 to 270	HG2C2.5		Research team and GMSL team support community
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	3	2	Short Term	2	1	4.00	72	12 to 180			
					Middle Term	2	2						
					Long Term	2	3						
		Local government	3	1	Short Term	2	1	4.00	36	06 to 90			
					Middle Term	2	2						
					Long Term	2	3						
		State	3	3	Short Term	2	1	4.00	108	18 to 270			Possible conflict with protectionist elements
					Middle Term	2	2						
					Long Term	2	3						
		External entities	2	2	Short Term	1	1	2.00	24	12 to 180			Possible conflict with protectionist elements
					Middle Term	1	2						
					Long Term	1	3						
Impact of intervention	3	Intracommunity	3	3	Short Term	2	1	4.00	108	18 to 270	HG2C2.5 HG3C2.1		Immediate improvement of socioeconomics
					Middle Term	2	2						
					Long Term	2	3						
		Intercommunity	3	2	Short Term	2	1	4.00	72	12 to 180			Probably going to be indifferent to outcomes
					Middle Term	2	2						
					Long Term	2	3						
		Local government	3	1	Short Term	1	1	2.00	18	06 to 90			Possibly see opportunity for brownie points
					Middle Term	1	2						
					Long Term	1	3						
		State	4	3	Short Term	2	1	4.00	144	18 to 270			Possibly see opportunity for brownie points
					Middle Term	2	2						
					Long Term	2	3						
		External entities	1	2	Short Term	2	1	4.00	24	12 to 180			Might be a precedent that protectionists abhor
					Middle Term	2	2						
					Long Term	2	3						

Parameter	Weight	Value	Score
Sustainability of intervention	3	3	9
Cost of intervention	3	3	9

03. The rehabilitation of lands allowed to fall fallow through FD intervention can be rehabilitated or repurposed if these areas are now grown over to either Guinea or Mana grass and is of no real use either as forestry areas or agro-economic areas													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270	HG2C2.5		Research team and GMSL team support community
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	4	2	Short Term	2	1	4.00	96	12 to 180			
					Middle Term	2	2						
					Long Term	2	3						
		Local government	2	1	Short Term	2	1	4.00	24	06 to 90			
					Middle Term	2	2						
					Long Term	2	3						
		State	1	3	Short Term	2	1	4.00	36	18 to 270			Possible conflict with protectionist elements
					Middle Term	2	2						
					Long Term	2	3						
		External entities	1	2	Short Term	1	1	2.00	12	12 to 180			Possible conflict with protectionist elements
					Middle Term	1	2						
					Long Term	1	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270	HG2C2.5 HG3C2.1		Immediate improvement of socioeconomics
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	2	Short Term	3	1	6.00	180	12 to 180			Probably going to be indifferent to outcomes
					Middle Term	3	2						
					Long Term	3	3						
		Local government	1	1	Short Term	1	1	4.67	14	06 to 90			Possibly see opportunity for brownie points
					Middle Term	2	2						
					Long Term	3	3						
		State	1	3	Short Term	1	1	3.67	33	18 to 270			Possibly see opportunity for brownie points
					Middle Term	2	2						
					Long Term	2	3						
		External entities	1	3	Short Term	1	1	2.00	18	12 to 180			Might be a precedent that protectionists abhor
					Middle Term	1	2						
					Long Term	1	3						

Parameter	Weight	Value	Score
Sustainability of intervention	3	3	9
Cost of intervention	2	3	3

04. Explore possibilities of reestablishing sustainable chena cultivation and its potential to holistically solve many community and conservation problems													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270	HG4C1.1 through HG40C1	KPI-HG02 KPI-HG03	Sees positive and enthusiastic interest and low resistance
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	2	Short Term	2	1	4.00	120	12 to 180		KPI-HG02	Terrain level it is positive all around
					Middle Term	2	2						
					Long Term	2	3						
		Local government	1	1	Short Term	2	1	4.00	12	06 to 90			
					Middle Term	2	2						
					Long Term	2	3						
		State	1	3	Short Term	2	1	4.00	36	18 to 270		KPI-HG02	Ban of agrochemicals may be positive to this
					Middle Term	2	2						
					Long Term	2	3						
		External entities	1	2	Short Term	1	1	2.00	12	12 to 180		KPI-HG02	Significant resistance from protectionists
					Middle Term	1	2						
					Long Term	1	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270		KPI-HG02 KPI-HG03	Food sovereignty and strong socioeconomics
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	2	Short Term	3	1	6.00	180	12 to 180			Food sovereignty and strong socioeconomics
					Middle Term	3	2						
					Long Term	3	3						
		Local government	1	1	Short Term	1	1	4.67	14	06 to 90			Possibly see opportunity for brownie points
					Middle Term	2	2						
					Long Term	3	3						
		State	1	3	Short Term	1	1	4.67	42	18 to 270		KPI-HG02 KPI-HG03	May stay out if stakeholder conflict high
					Middle Term	2	2						
					Long Term	3	3						
		External entities	1	3	Short Term	1	1	3.00	27	12 to 180		KPI-HG02 KPI-HG03	Might be a precedent that protectionists abhor
					Middle Term	1	2						
					Long Term	2	3						

Parameter	Weight	Value	Score
Sustainability of intervention	2	3	6
Cost of intervention	1	3	3

05. Rehabilitate community Kitul harvests, possibly lobby for ABS, explore cardomom cultivation in settlements by creating microhabitats and establish a pepper processing plant													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270	HG4C1.1 through HG4OC1	KPI-HG02 KPI-HG03	Communities enter the forest anyway despite bans
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	2	Short Term	2	1	4.00	120	12 to 180			Use of commons for all communities critical to them
					Middle Term	2	2						
					Long Term	2	3						
		Local government	4	1	Short Term	2	1	4.00	48	06 to 90			GMSL does not see either protectionists or state/NSAs being too resistive to these moves given the fact that some of them are encapsulated implicitly in the CBD
					Middle Term	2	2						
					Long Term	2	3						
		State	4	3	Short Term	2	1	4.00	144	18 to 270		KPI-HG02	
					Middle Term	2	2						
					Long Term	2	3						
		External entities	4	2	Short Term	1	1	2.00	48	12 to 180		KPI-HG02 KPI-HG03	
					Middle Term	1	2						
					Long Term	1	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270		KPI-HG02	Must be allowed into forests legally but with substantive self and external controls
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	2	Short Term	3	1	6.00	180	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
		Local government	3	1	Short Term	1	1	4.67	42	06 to 90			If communities are allowed to use the forests their stewardship / herdsmanship of those very forests can be fairly easily reestablished
					Middle Term	2	2						
					Long Term	3	3						
		State	3	3	Short Term	1	1	4.67	126	18 to 270			
					Middle Term	2	2						
					Long Term	3	3						
		External entities	3	3	Short Term	1	1	3.00	81	12 to 180			
					Middle Term	1	2						
					Long Term	2	3						

Parameter	Weight	Value	Score
Sustainability of intervention	3	3	9
Cost of intervention	2	3	6

06. Attempt to significantly reduce agro-toxins through a weaning program to move gradually towards natural methods													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	3	3	Short Term	1	1	4.00	108	18 to 270	HG4C3.6	KPI-HG01 through KPI-HG04	GMSL researchers and Team note communities habituated to agrochemicals
					Middle Term	1	2						
					Long Term	3	3						
		Intercommunity	3	2	Short Term	1	1	4.00	72	12 to 180			
					Middle Term	1	2						
					Long Term	3	3						
		Local government	3	2	Short Term	2	1	4.00	72	06 to 90		KPI-HG02	Ban on agrochemicals seen as significant positive influence among state and non-state actors
					Middle Term	2	2						
					Long Term	2	3						
		State	5	2	Short Term	2	1	4.00	72	18 to 270			
					Middle Term	2	2						
					Long Term	2	3						
		External entities	5	1	Short Term	3	1	6.00	90	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270	HG4C3.6	KPI-HG01 through KPI-HG04	Communities seem ready on the surface but eventually it will be economics that rule their approach
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	3	Short Term	3	1	6.00	270	12 to 180	HG4C3.6		
					Middle Term	3	2						
					Long Term	3	3						
		Local government	5	3	Short Term	1	1	3.00	81	06 to 90			Definite opportunity to score brownie points
					Middle Term	1	2						
					Long Term	2	3						
		State	5	3	Short Term	1	1	4.00	108	18 to 270			Definite opportunity to score brownie points
					Middle Term	1	2						
					Long Term	3	3						
		External entities	4	3	Short Term	1	1	3.00	108	12 to 180			
					Middle Term	1	2						
					Long Term	2	3						

Parameter	Weight	Value	Score
Sustainability of intervention	3	2	6
Cost of intervention	2	3	6

07. A strong water management mechanisms through simple technological applications and high levels of awareness of optimizing shared commons such as the Heen ganga program to move gradually towards natural methods													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270		KPI-HG02 KPI-HG03	Horrible water management impacts upstream and downstream communities
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	3	Short Term	3	1	6.00	270	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
		Local government	3	3	Short Term	2	1	4.00	108	06 to 90		KPI-HG02 KPI-HG03	Community water projects largely suboptimal
					Middle Term	2	2						
					Long Term	2	3						
		State	3	3	Short Term	3	1	6.00	162	18 to 270		KPI-HG02 KPI-HG03	Have not really focused on issue on the Heen Ganga
					Middle Term	3	2						
					Long Term	3	3						
		External entities	5	3	Short Term	3	1	6.00	270	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270			Simple awareness might change status-quo
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	3	Short Term	3	1	6.00	270	12 to 180			Need for mutual engagement of all basin communities
					Middle Term	3	2						
					Long Term	3	3						
		Local government	3	3	Short Term	3	1	6.00	162	06 to 90			Will solve a few headaches for local government
					Middle Term	3	2						
					Long Term	3	3						
		State	3	3	Short Term	2	1	4.00	108	18 to 270			
					Middle Term	2	2						
					Long Term	2	3						
		External entities	4	3	Short Term	3	1	6.00	216	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						

Parameter	Weight	Value	Score
Sustainability of intervention	3	3	9
Cost of intervention	3	2	6

08. Difficult but possible resolution of caste related conflict within the area to ensure everyone works together towards optimizing the socioeconomic realities of the all communities living in the upper reaches of the Heen Ganga													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	1	3	Short Term	3	1	6.00	54	18 to 270			Understood via contention during meet but never openly discussed (sort of open secret)
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	1	3	Short Term	3	1	6.00	54	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
		Local government	3	1	Short Term	2	1	4.00	36	06 to 90			
					Middle Term	2	2						
					Long Term	2	3						
		State	1	1	Short Term	3	1	6.00	18	18 to 270			
					Middle Term	3	2						
					Long Term	3	3						
		External entities	3	1	Short Term	3	1	6.00	54	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	1	1	4.67	210	18 to 270			Would be good all around but these issues are tough to solve
					Middle Term	2	2						
					Long Term	3	3						
		Intercommunity	5	3	Short Term	1	1	4.67	210	12 to 180			
					Middle Term	2	2						
					Long Term	3	3						
		Local government	3	3	Short Term	1	1	2.00	54	06 to 90			
					Middle Term	1	2						
					Long Term	1	3						
		State	3	3	Short Term	1	1	2.00	54	18 to 270			
					Middle Term	1	2						
					Long Term	1	3						
		External entities	4	3	Short Term	2	1	4.00	144	12 to 180			
					Middle Term	2	2						
					Long Term	2	3						

Parameter	Weight	Value	Score
Sustainability of intervention	3	1	3
Cost of intervention	1	1	1

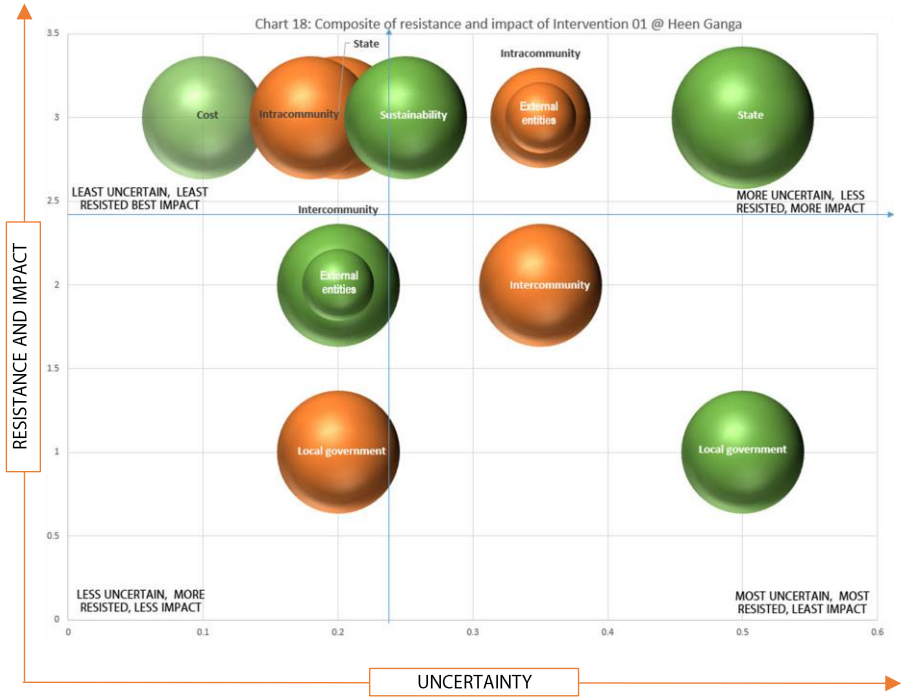
09. The Heen Ganga may be used as an ideal Segway to pushing the government to sign into the Nagoya protocol while sustainable management of environmental resources by the community itself is very possible here													
Parameter	**Weight**	**Attribute**	**Value**	**Weight**	**Temporal bracket (TB)**	**Value**	**Weight**	**Weighted Average of TB**	**Score**	**Range**	**SCORECARD influences**	**KPI influences**	**Operator influences**
Resistance to intervention	3	Intracommunity	5	3	Short Term	3	1	6.00	270	18 to 270			Observations of the GMSL team but not directly informed by SCORECARD or KPIs.
					Middle Term	3	2						
					Long Term	3	3						
		Intercommunity	5	3	Short Term	3	1	6.00	270	12 to 180			
					Middle Term	3	2						
					Long Term	3	3						
		Local government	1	1	Short Term	1	1	2.00	6	06 to 90			
					Middle Term	1	2						
					Long Term	1	3						
		State	2	1	Short Term	1	1	2.00	12	18 to 270			
					Middle Term	1	2						
					Long Term	1	3						
		External entities	1	1	Short Term	1	1	2.00	6	12 to 180			
					Middle Term	1	2						
					Long Term	1	3						
Impact of intervention	3	Intracommunity	5	3	Short Term	1	1	4.67	210	18 to 270			
					Middle Term	2	2						
					Long Term	3	3						
		Intercommunity	5	3	Short Term	1	1	4.67	210	12 to 180			
					Middle Term	2	2						
					Long Term	3	3						
		Local government	3	3	Short Term	1	1	2.00	54	06 to 90			
					Middle Term	1	2						
					Long Term	1	3						
		State	3	3	Short Term	1	1	2.00	54	18 to 270			
					Middle Term	1	2						
					Long Term	1	3						
		External entities	4	3	Short Term	2	1	4.00	144	12 to 180			
					Middle Term	2	2						
					Long Term	2	3						

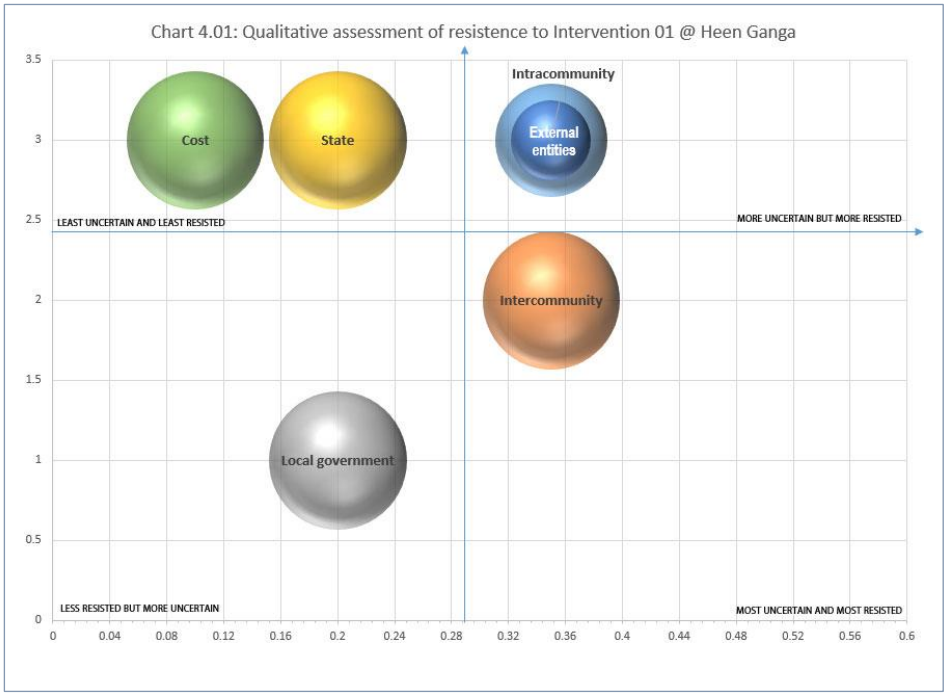
Parameter	Weight	Value	Score
Sustainability of intervention	3	3	9
Cost of intervention	3	3	9

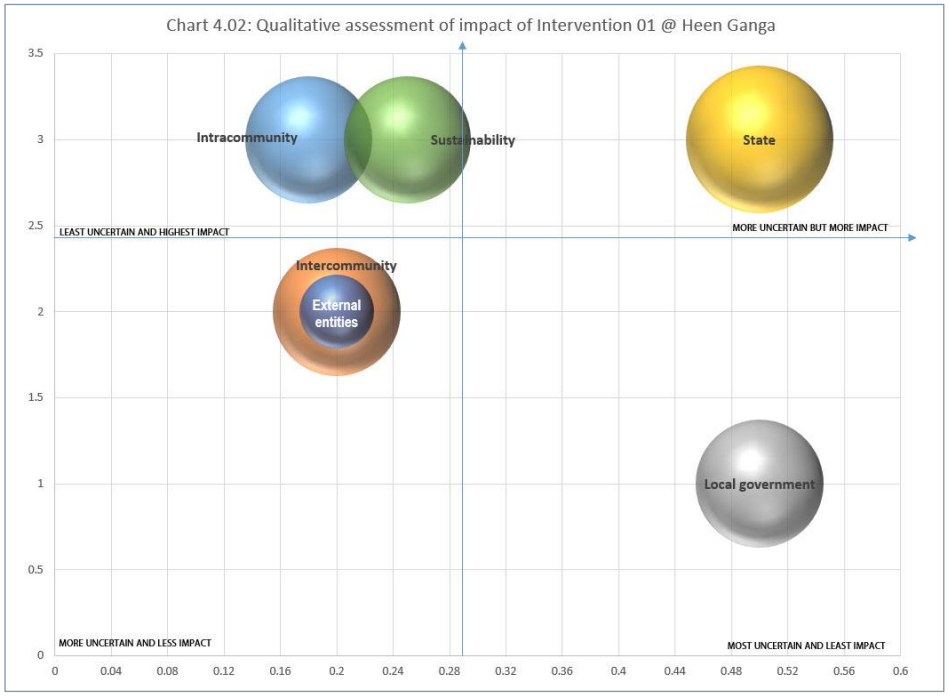
BUBBLE PLOTS FOR EACH INTERVENTION

INTERVENTION 01: ENCOURAGE OUT-MIGRATING FAMILIES TO RETURN IF SOCIOECONOMIC STABILITY AND DEVELOPMENT ENHANCEMENT IS VISIBLE AS A LONG TERM PLAN OR PROVEN IN THE SHORT TERM

	Ecosystem demographic	Weight reliability	Weight uncertainty	Weight	Value	Index
Resistance	Intracommunity	0.65	0.35	3	2	17.14
	Intercommunity	0.65	0.35	2	3	17.14
	Local government	0.8	0.2	1	3	15.00
	State	0.8	0.2	3	3	45.00
	External entities	0.65	0.35	3	1	8.57
	Cost	0.9	0.1	3	3	90.00
Impact	Intracommunity	0.8	0.18	3	3	50.00
	Intercommunity	0.8	0.2	2	3	30.00
	Local government	0.5	0.5	1	3	6.00
	State	0.5	0.5	3	4	24.00
	External entities	0.8	0.2	2	1	10.00
	Sustainability	0.75	0.25	3	3	36.00
Average uncertainty:0.28, **Average parametric weight: (reliability and uncertainty combined)** 2.42						







INTERVENTION 02: THE REHABILITATION OF LANDS ALLOWED TO FALL FALLOW THROUGH FD INTERVENTION REHABILITATED OR REPURPOSED IF THESE AREAS ARE NOW GROWN OVER TO EITHER GUINEA OR MANA GRASS AND IS OF NO REAL USE AS EITHER FORESTRY AREAS OR AGRO-ECONOMIC AREAS

	Ecosystem demographic	Weight reliability	Weight uncertainty	Weight	Value	Index
Resistance	Intracommunity	0.65	0.35	3	2	17.14
	Intercommunity	0.65	0.35	2	3	17.14
	Local government	0.8	0.2	1	3	15.00
	State	0.8	0.2	3	3	45.00
	External entities	0.65	0.35	3	1	8.57
	Cost	0.93	0.08	3	3	112.50
Impact	Intracommunity	0.65	0.18	3	3	50.00
	Intercommunity	0.65	0.2	2	3	30.00
	Local government	0.8	0.5	1	3	6.00
	State	0.8	0.5	3	4	24.00
	External entities	0.65	0.2	2	1	10.00
	Sustainability	0.90	0.1	3	3	90.00
Average uncertainty:0.27, **Average parametric weight: (reliability and uncertainty combined)** 2.42						

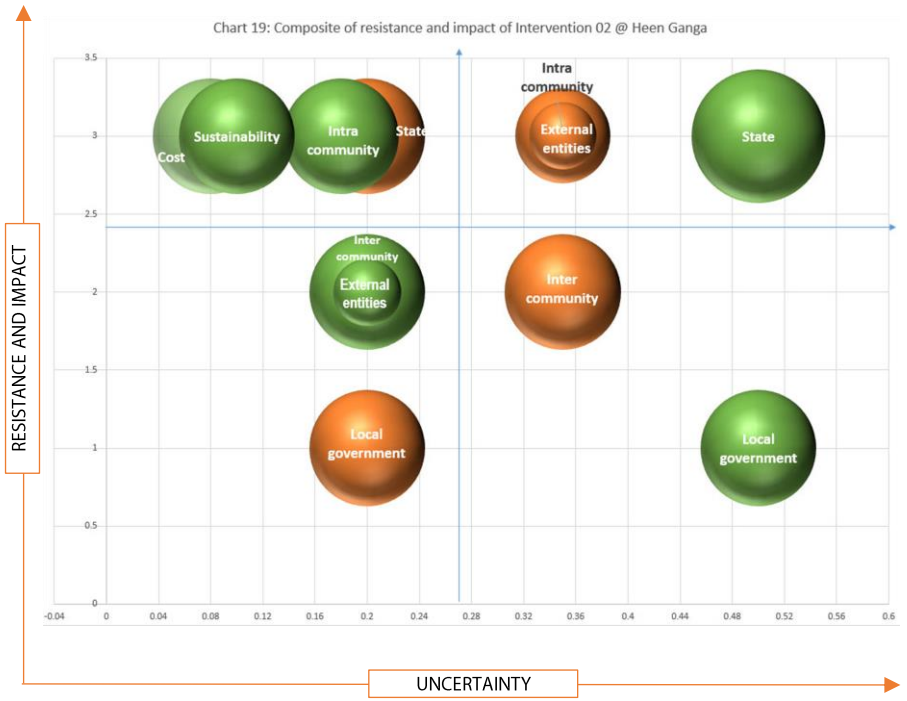


Chart 19: Composite of resistance and impact of Intervention 02 @ Heen Ganga
RESISTANCE AND IMPACT
UNCERTAINTY
Cost
Sustainability
Intra community
State
Intra community
External entities
State
Inter community
External entities
Inter community
Local government
Local government

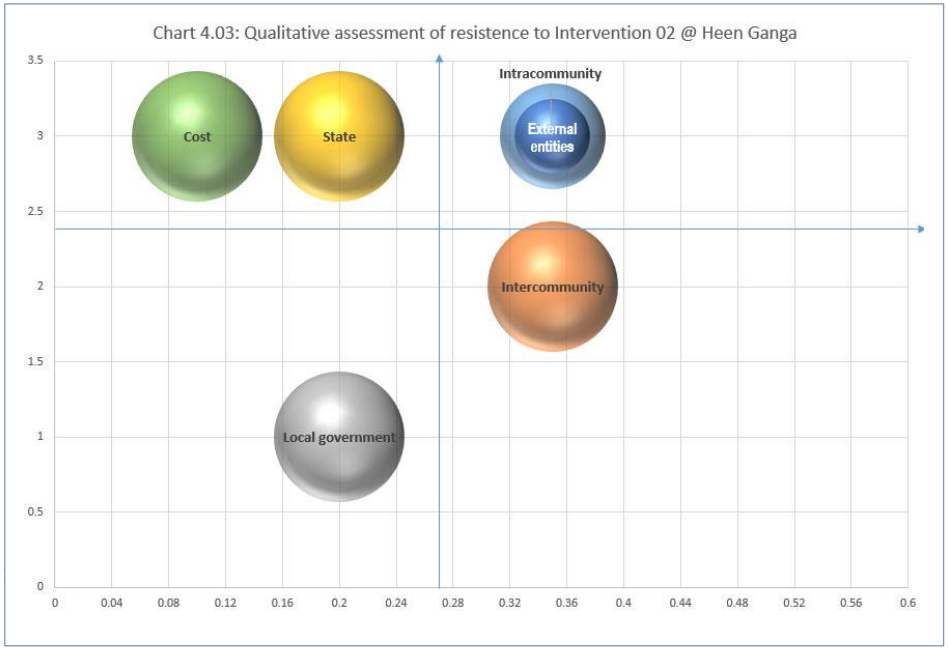


Chart 4.03: Qualitative assessment of resistence to Intervention 02 @ Heen Ganga
Cost
State
Intracommunity
External entities
Intercommunity
Local government

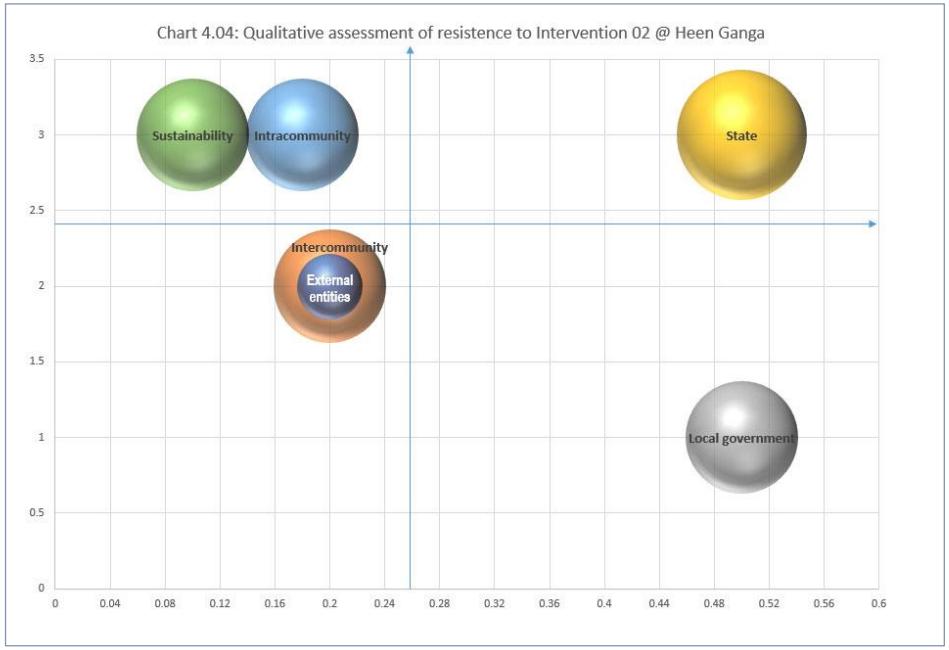


Chart 4.04: Qualitative assessment of resistence to Intervention 02 @ Heen Ganga
Sustainability
Intracommunity
State
Intercommunity
External entities
Local government