



JSC Nenskra Hydro

Safety, Health, Environment and Community Annual Report for 2017

December 2017



AGENDA

#	Agenda Point
1	Sustainability Framework, Systems and E&S risks
2	Safety, Health, Environment and Community 2017 Metrics
3	ESIA and Public Disclosure
4	Stakeholder Engagement
5	Public Relations
6	Community Investment Program
7	Environment and Biodiversity
8	LALRP
9	Health and Safety
10	Monitoring



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Section 1

Sustainability Framework, Systems and E&S Risks

Sustainability Policy

Vision

JSC Nenskra Hydro established as a company that conducts business and operates in an environmentally responsible manner. The company's long-term success is dependent on our ability to deliver high quality products and services whilst protecting the environment.

Commitment

JSC Nenskra Hydro staff has ultimate responsibility for environmental performance and is committed to the achievement of environmental excellence. JSC Nenskra Hydro is therefore committed to:

- Complying with all applicable environmental laws and regulations and relevant standards;
- Minimizing our impact on the environment through pollution prevention, minimization of waste and emissions and the efficient use of energy and resource;
- Pursuing a goal of zero environmental incidents
- Transparency in the reporting of the Company's environmental performance;
- Setting objectives and targets for continual improvement with auditing and monitoring of performance to ensure compliance;
- Promoting a culture in which all employees share this commitment by clearly defining our expectations;
- We are fully committed to sustainability and strive to integrate sustainable development principles and a comprehensive stakeholder engagement process into its operating philosophy.

Objective

To meet this commitment at high level JSC Nenskra Hydro will:

- Develop and maintain minimum standards and expectations
- publish regular performance reports and openly discuss our environmental performance with stakeholders;
- periodically review the suitability and effectiveness of this policy, our management systems, targets and objectives
- develop and maintain certified environmental management systems, in accordance with ISO 14001 standards;
- provide appropriate training to all employees to enable them to carry out their work with due respect and care for the environment;
- engage with clients, contractors and suppliers to deliver a high standard of environmental performance;
- Deliver long term value to our employees, contribute to the development of local communities, investing in sustainability and environment protection.

Responsibility and implementation

Responsibility for compliance with this policy lies with the Chief Executives and their respective Managing Directors. It is also the responsibility of individuals to be aware of potential environmental risks and to help to reduce these risks at the locations where they work. JSC Nenskra Hydro will implement this policy and will conduct periodic audits/reviews to verify compliance and promote continual improvement.

SHEC Management System



Systems Developed in 2017

- SHEC Management system - Framework
- Incident Reporting - System in place
- Grievance Mechanism
- HSE Inspections
- Social Induction
- Weekly and Monthly Reporting, Evidence gathering system
- Annual E&S Planning

E&S Risks and Challenges

List of Risks and Challenges

Community protests and blockades

Media exposure

Unrealistic expectations regarding benefits, employment, business opportunities and community development

Land acquisition (expectations regarding compensation, conflict regarding land issues, timing)

Preparedness at community level to take advantages of opportunities

Staff turnover

Unfair and groundless allegations from NGO sector



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Section 2

SHEC 2017 Metrics

SHEC Metrics (recorded from Sept 2017)

SHEC Metrics	
Environment Incidents	1
Volume/weight of waste remove out of the camp (Kg)	12,980
Volume/weight of Hazardous waste onsite(Kg)	3,288
Volume of Hydrocarbons in Storage (liters)	100,561
Volume of Hydrocarbons Used	21,082
Social Incidents	14
Grievances	19
HS Incidents	10
SHEC NCR (Non-conformity)	20



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Section 3

ESIA and Public Disclosure

ESIA – Environmental and Social Impact Assessment

- ESIA initial package developed by GAMMA in 2015
- Draft ESIA supplementary package disclosed in February 2017 (SLR)
- ESIA supplementary package completed in November 2017 (SLR)
- ESIA supplementary package translated into Georgian in January 2018
- ESIA supplementary package disclosed by Lenders and JSCNH (partially in November 2017 and full version in January 2018)
- Public Disclosure Report disclosed in November 2017 in English and January 2018 in Georgian

Public Disclosure Meetings in 2017

- In total more than 950 people participated in the public consultation meetings both in Tbilisi and 2 valleys
- In order to strengthen outreach, the following means were used:
 - ✓ Providing physical copies of the Supplementary Package (SP) to different stakeholders
 - ✓ Distributing more than 100 USBs to the community members containing the SP.
 - ✓ Uploading the SP on the JSCNH website and Potential Lenders' website
 - ✓ Holding introductory meetings in Nenskra and Nakra Valleys
 - ✓ Conducting public consultation meetings in Nenskra and Nakra Valleys and Tbilisi, including an Open House Session in Nenskra and Nakra Valleys

Public Disclosure Meetings in 2017

- Organizing focus group sessions/surveys to determine if the population had specific information requests and/or concerns
- Organizing focus group discussions with vulnerable people
- Disclosing information to the mass media through social media and press releases
- Distributing communication tools such as brochures
- Producing video materials on Dam Safety and project

Public Disclosure Meetings in 2017

Main issues discussed during the disclosure process

- Dam Safety
- Health & Safety measures
- Environment impacts- biodiversity/ ecological impacts
- Climate change concerns
- Cultural heritage/archaeology
- Community Investment

Open House meeting in Nenskra and Nakra _ August, 2017





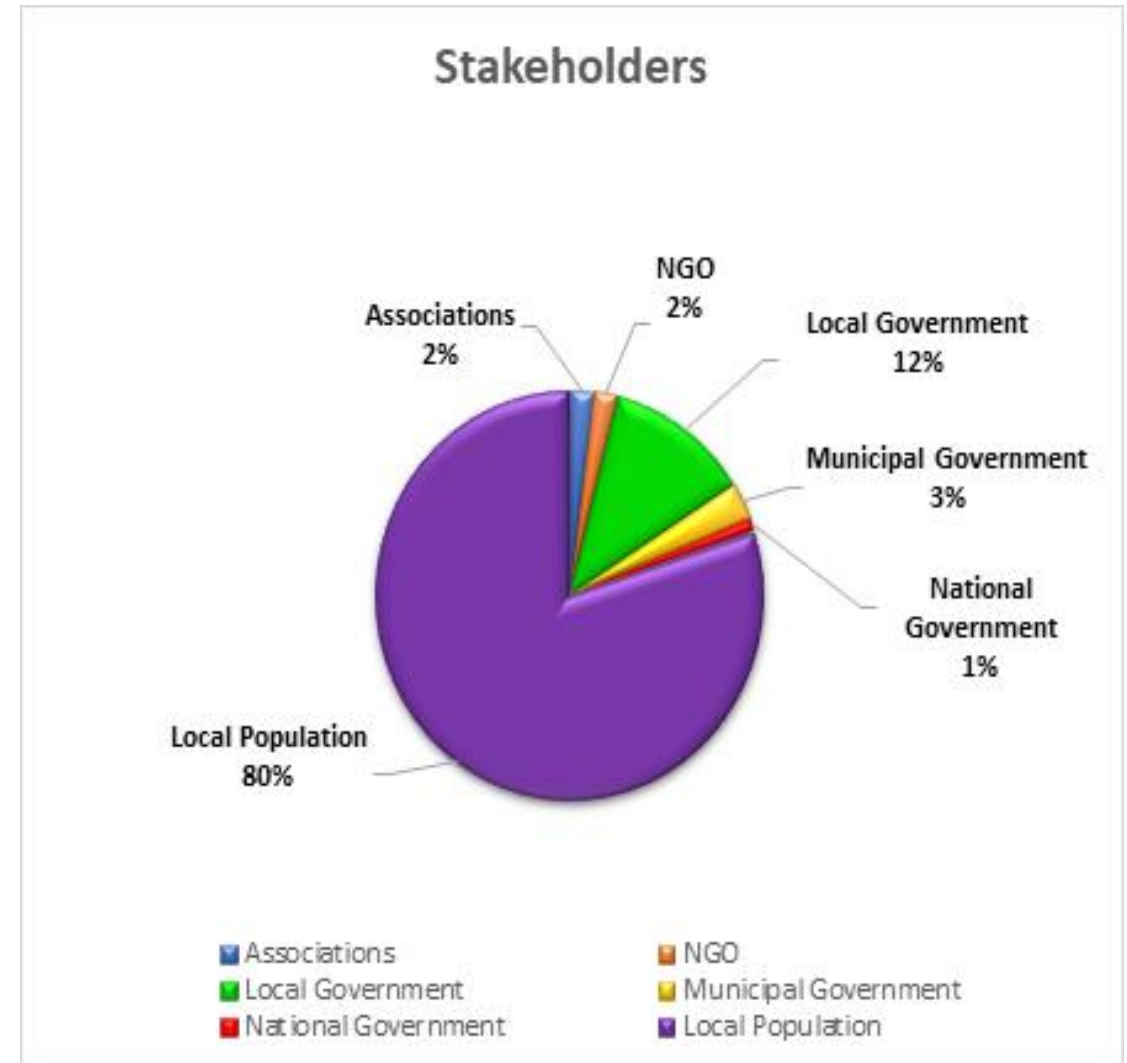
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Section 4

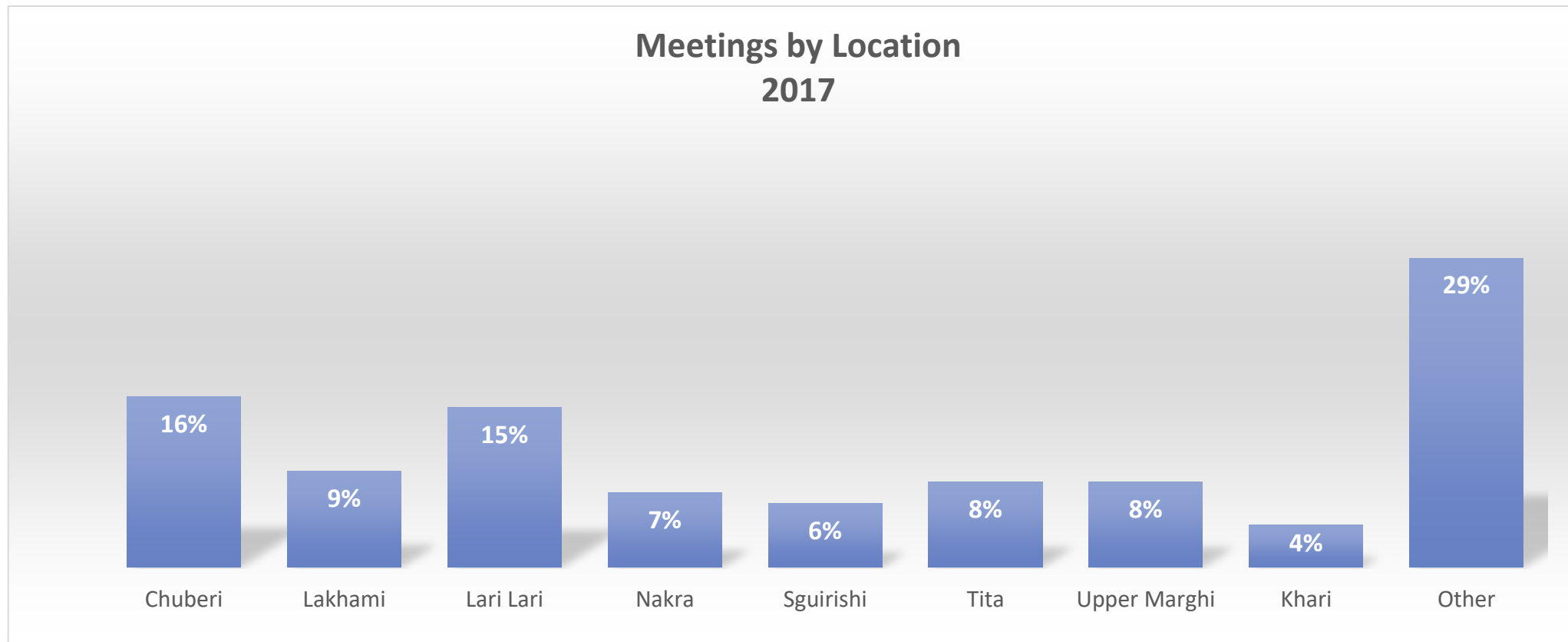
Stakeholder Engagement

Meetings and informal sessions

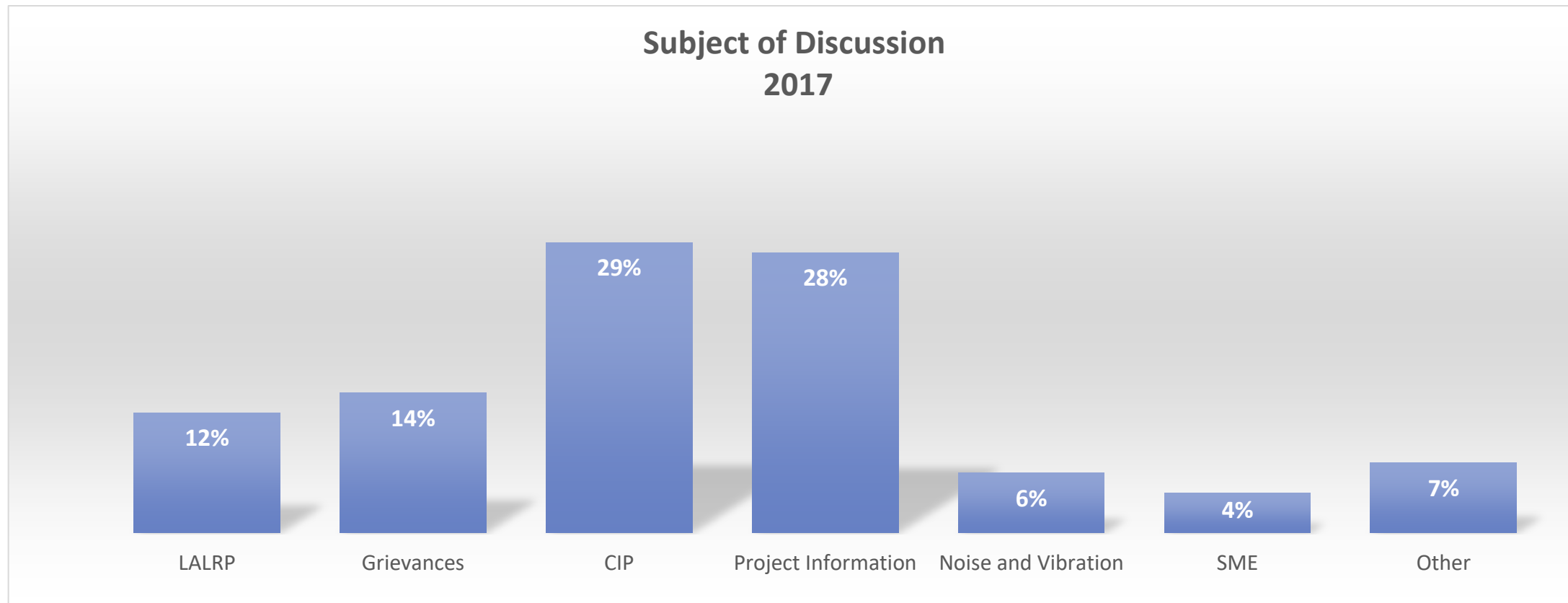
- In total 206 meetings were held between Sept-Dec 2017
- 456 participants (30% women)
- Social disturbance is a risk for the project, numerous incidents regarding community blockades due to expectations regarding social benefits and asset/land compensation



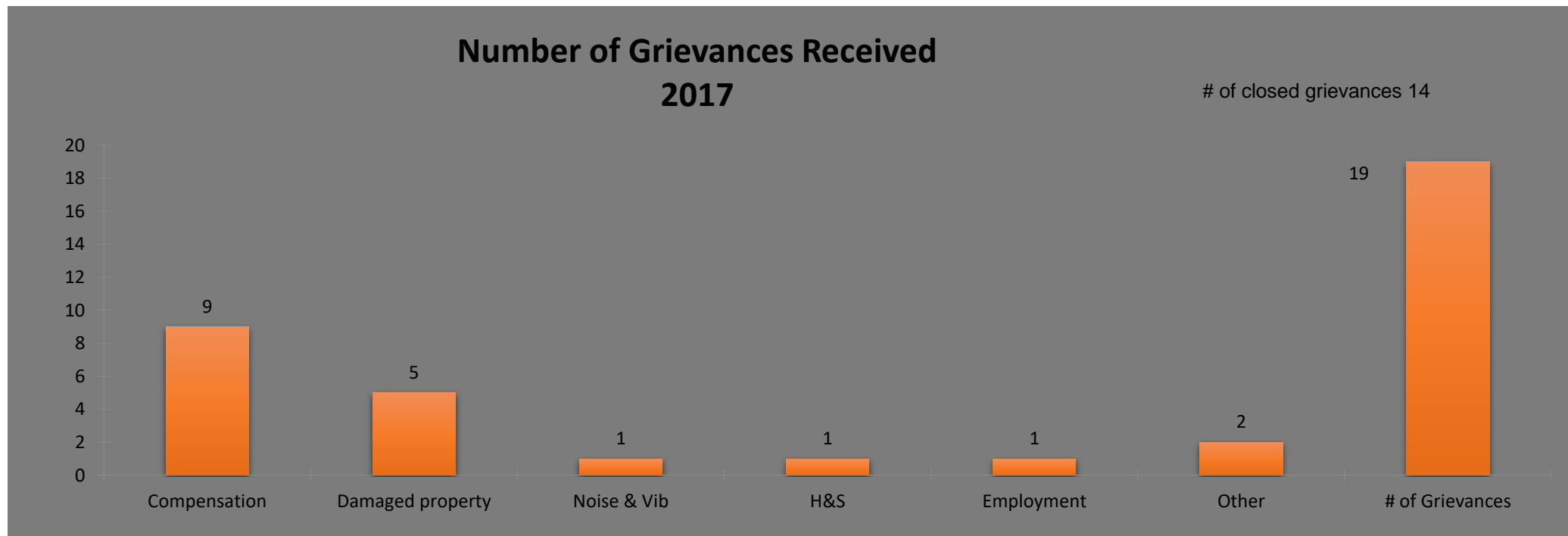
Meetings with Stakeholders



Subject of Discussion



Grievances



Communication Activities

- Developed and started the Communication log for formal and informal meetings.
- Initiated weekly (August) and monthly (September) reporting for internal and external stakeholders.
- Initiated in September 2017 monthly E&S calls with lenders.
- Drawing competition conducted in 3 schools in Nenskra and Nakra valleys, the theme of the competition was: “The way I see nature”. In total, more than 90 children were part of this competition.

ART Contest in Nenskra and Nakra Schools



Fabric bags and calendars (postponed to 2019) created using the drawings of the 12 winners of the Art Contest



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Section 5

Public Relations

Community and Stakeholders Engagement

- In 2017, 9 different brochures were produced for the local communities and project stakeholders, covering Dam Safety, CIP, Land Acquisition, Environmental and Employment issues
- 2 videos were produced – general information about the project and dam safety
- Community newsletter was launched in October 2017 (for 2018, 3 newsletters will be issued)
- Official Facebook page launch
- Re-designed website launched

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Nenskra HPP

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NEWSLETTER

#1

2106

Nenskra Hydropower Project Newsletter

October

ABOUT JSC NENSKRA HYDRO

JSC Nenskra Hydro Company is constructing the Nenskra Hydropower Plant in the Nenskra and Nakra river valleys in the Mestia Municipality of the Svaneti region. The 280MW power plant will generate over 1,200,000 GWh of electricity annually, which will be fully consumed by the Georgian market and will significantly decrease the need for energy import in winter. JSC Nenskra Hydro was established in 2015 by Korea Water Resources Corporation K-water and JSC Partnership Fund.

JSC NENSKRA LAUNCHES NEWSLETTER

JSC Nenskra Hydro will be publishing regular newsletters to contribute to key stakeholders' understanding of the project. The newsletters will likely be published quarterly and will consolidate project news. Community liaison officers will continue to be available daily in the project area and community information centers will be open daily, Monday–Friday from 2 p.m. to 4 p.m.

IN THE OCTOBER ISSUE

In this issue, JSC Nenskra revisits the questions most-frequently asked during the open house sessions and consultations with the Nenskra and Nakra communities held in August 2017. Future newsletters will offer more comprehensive updates on the various aspects of the project and will also be based on community feedback and subject of interest.

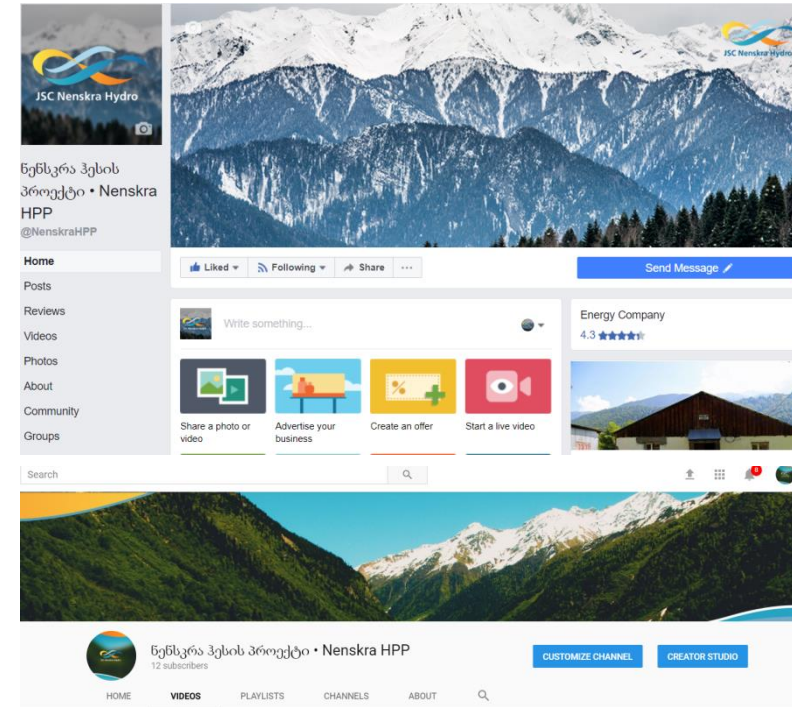
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Digital Presence



Redesigned
website Eng/Geo

Wikipedia article
Eng/Geo



Facebook
Page



YouTube
Channel



www.nenskra.ge



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Section 6

Community Investment Program

Community Investment program

- CIP was formalized in September 2017
- 2 CIP committees were formed
- As per recommendation of the IPOE and lenders the initial focus was on developing “fast track” projects and in parallel start the discussion of more sustainable initiatives

Community Investment program Key Directions

I

- **Economic Development and SME**

II

- **Skills Trainings**

III

- **Small scale infrastructure**

IV

- **Fast Track Projects**

Community Investment program – key 2017 results

- CIP Advisory Committee established in Nenskra and Nakra
- 42 members, 25% is woman
- CIP operation principles defined
- Pre-employment training program established
- English classes, computer classes and technical skills training program concept were initiated and some were launched
- 50 local residents in Nenskra enrolled in English classes
- 10 local residents trained in Guest House Management Training
- Education centers are being established in Nenskra and Nakra valleys

Community Investment program – key 2017 results

- 8 fast track projects funded in Nakra
- 5 fast track projects funded in Nenskra
- The river bed cleaning in Nakra valley was completed

Community Investment program

- Full list of projects implemented in 2017 Nenskra Valley

Fast Track Projects in Nenskra Valley

Complete set of personal computer and projector for Chuberi and Khar-Sgurishi schools

Plow for improvement agricultural capacity in Chuberi

Different sports equipment for Chuberi and Khar-Sgurishi schools
(volleyball nets and balls, basketball balls, football balls, tennis tables)

Folk Musical instrument for Children's ensemble "NENSKRA"

Electric ovens and cooking sets for Chuberi, Lakhami and Khar-Sgurishi kindergartens

Chairs for Chuberi, Lakhami and Khar-Sgurishi kindergartens

Miscellaneous stationery, greetings cards, children's literature and different toys for Chuberi, Lakhami and Khar-Sgurishi kindergartens

Gym equipment for Chuberi

Hose for water supply system improvement in Chuberi school

Skills Trainings

Rehabilitation of Educational center in Nenskra for computer classes

Arrangement of facility for English language classes

50 local residents enrolled in English classes

10 local residents trained in Guest House Management Training

Small Scale Infrastructural Projects

Full Rehabilitation of Sports Centre in Nenskra valley

Other projects not funded by CIP

Vehicle HYUNDAI H350 BUS 2.5 M/T Diesel Trivman to enhance mobilization of the community

Fold up tables and Chairs for Chuberi Cultural Centre

Air conditioners with supportive materials for Chuberi Cultural Centre

Community Investment program

Full list of projects implemented in 2017 Nakra valley

Fast Track Projects for Educational Institution in Nakra Valley

Complete set of personal computer and projector Nakra school

Different sports equipment for Nakra school
(volleyball nets and balls, basketball balls, football balls, tennis tables)

Folk Musical instrument for Children attending Music lessons in Cultural House

Electric ovens and cooking sets for Nakra kindergarten

Chairs for Nakra kindergarten

Miscellaneous stationery, greetings cards, children's literature and different toys for Nakra kindergarten

Gym equipment for Nakra

Other projects not funded by CIP

Air conditioners with supportive materials for Nakra Cultural Centre

Fold Up tables and Chairs for Nakra Cultural Centre

Fast Track Projects implemented in Nakra Valley

Potable water supply materials for Tsareli village

Potable water supply materials for Latsomba and Nenkvashi village

Potable water supply materials for Anili Village

Potable water supply materials for Kichkhuldashi village

Potable water supply materials for Tavrari village

Ritual Equipment for all communities in Nakra Valley

Small Scale Infrastructural Projects

Nakra river bedding rehabilitation works for flooding prevention

CIP Photos





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Section 7

Environment and Biodiversity

Key Monitoring conducted in 2017

- Water Monitoring
- River Fish Monitoring (4-11 September)
- Brown Bear Monitoring (September and October)
- Air emission monitoring
- Noise and vibration monitoring

Large Carnivore Monitoring (brown bear, lynx and wolf)

- 2 surveys done: Sept and Oct.
- 5 camera traps installed.
- The results show that brown bear are present within the surveyed parts of the Nenskra valley, including the valley bottom upstream and downstream of the dam area, the lower tributary valleys and the Devra valley tributary.
- No evidence of brown bear was recorded within the Nakra valley, although previous records of bear indicate that brown bear are transiently present in the Nakra valley.
- DNA results show presence of 12 bears (8 female and 4 male).



Bear print – Lower Nenskra Valley



Wolf print – Devra Valley

Fish, Invertebrates and Otter Survey

- Brown trout lives in both rivers (vulnerable Georgia red list, IUCN least concern). Highest density in reservoir area.
- Two fish invasive species identified; rainbow trout and carp.
- Anecdotal evidence of fish called “oraguli”, species of fish could not be confirmed.
- 17 taxonomic groups of macroinvertebrates were identified, no large with conservation status.



Monitoring station – Downstream of Reservoir



Rainbow trout

Environmental Monitoring

- Water: Nenskra and Nakra rivers and springs and mineral water (Sept and October). Parameters measured: Temperature, pH, Turbidity, Dissolved oxygen and Conductivity (baseline purposes).
- Noise (Sept and October). Powerhouse area.
- Vibration (Sept and October). Powerhouse area.



Water sampling location in Nenskra river



HSE Manager sampling water



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Section 8

LALRP

Construction Sites

- Power House Area;
- Dam and Reservoir Area;
- Permanent Operator's Village;
- Nenskra Road;
- Nakra Weir and Water Intake;

Project Infrastructure

Powerhouse

Total area required by the project for permanent use: 118 (ha)

The land plots required for the construction of powerhouse have already been transferred to JSCNH with the respective rights

Lands and assets affected by the project were compensated at full replacement cost

Dam and Reservoir Area

Total area required by the project for construction for permanent use as well as for temporary use: 621 (ha)

The land plots required for construction of dam and reservoir have already been transferred to JSCNH with the respective rights

The wooden cottages located on pastures were compensated to the population by JSC "Nenskra Hydro", at full replacement cost, in accordance with the LALRP

Consultations connected with the pasture areas located within the construction area, is on-going.

Project Infrastructure

Permanent Operators' Village

Total area required by the project for permanent use: 1.2 (ha)

The land plot required for the construction of POV has already been transferred to JSCNH with the respective rights

The compensation for loss, at full replacement cost, has been provided to affected households in accordance with the LALRP

Nenskra Road

35 households are affected by the construction activities connected with widening of existing access road to the dam and reservoir area

The compensation for loss has been provided to 19 affected households, at full replacement value, in accordance with the LALRP

The consultation process with the remaining part of the project affected people is on-going

Nakra Weir and Water Intake Area

Total area required by the project for construction of permanent use as well as for temporary use: 44 (ha)

The consultation process with the population of Nakra village should start in 2018, pending design



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Section 9

Health & Safety

CC-ESMP Management System Reviewed

1	Driver Safety, Fatigue and Journey Management Procedure
2	Security Management Plan
3	Waste Management Plan
4	Air Emission and Dust Control Plan
5	Chance find procedure
6	Effluent Management Plan
7	Erosion and Sediment Control Plan
8	Hazardous substance and hazardous waste management plan
9	Health Management Plan
10	Noise and Vibration Control Plan
11	Traffic Management Plan
12	Spoil disposal Management Plan
13	Site Environment protection plan



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Section 10

Monitoring

Key Monitoring conducted in 2017

- Internal: Regular site inspections.
- IPOE (International Panel of Experts)
- Artelia's inception monitoring mission conducted in August 2017
- Artelia's first monitoring mission conducted in December 2017

THANK YOU!