

## CASE STUDY

# CASE ANALYSIS OF PUBLIC PARTICIPATION IN ENVIRONMENTAL IMPACT ASSESSMENT OF IRRIGATION SCHEMES, CENTRAL RIFT VALLEY IN ETHIOPIA

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■ Public participation (PP) is an essential component of environmental impact assessment (EIA). In the UNECE Espoo convention (1991) in art. 1 “the public” is defined as “one or more natural or legal person”. Thus, any concerned person has the right to be involved in project decisions, not only individuals, who are adversely or beneficially affected by a proposed intervention subject to a decision-making process. Ideally participation is a “voluntary process in which people including marginal groups (poor, women, indigenous, ethnic minorities etc.), come together with project authorities to share, negotiate and control the decision-making process in project design and management”<sup>1</sup>.

■ Ethiopia as a developing country is suffering from lack of democratic institutions, weak governance and communication structures, lack of compliance and enforcement, and weak political commitment<sup>2</sup>. No regulation to manage water extraction exists, as water is considered as a free resource. Governmental policies are focused on expanding irrigation development for economic purposes, in spite of encouraging water use efficiency. Combined with a low level of compliance to environmental regulation, including licensing of permits, expanding irrigation development in CRV is jeopardizing the riverbasin’s environmental sustainability. Contextual factors and corruption play an essential role for the lack of effective public involvement in project implementation as part of environmental impact assessments, and the non-compliance with existing legal and planning regulations. Additionally the public is not politically mature enough to actively engage in decision-making yet. Beside insufficient mechanisms to do this, there is a lack of awareness, ambition and culture of participation. No independent review of the quality of EIA is undertaken. In practice, key objectives of PP such as involvement of all stakeholders, early and

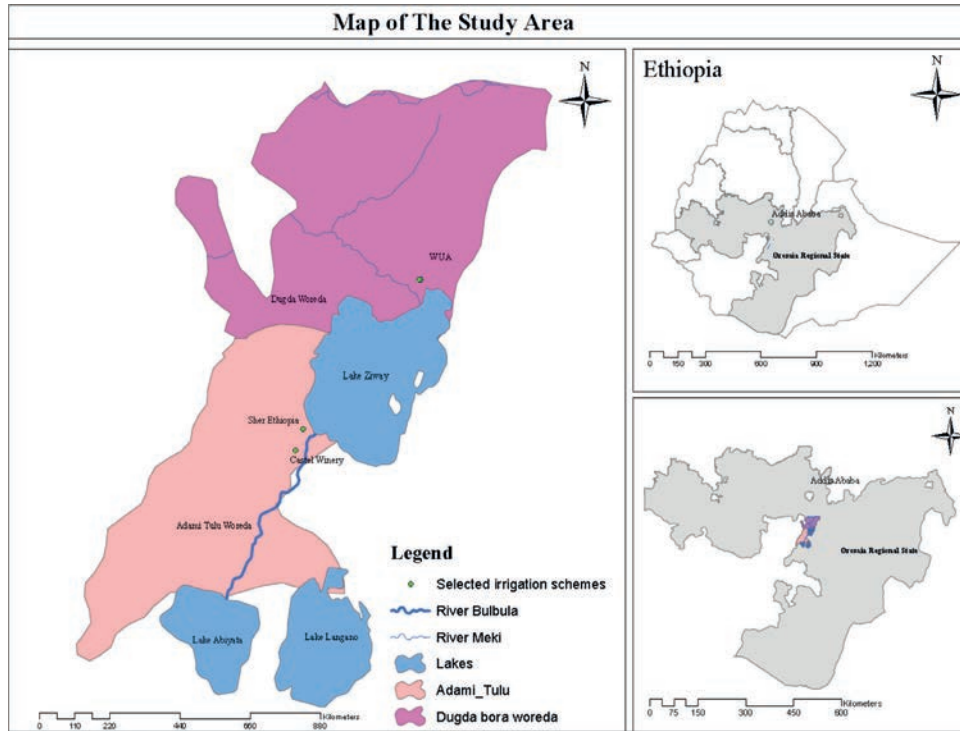
adequate access to information, transparency of the integration of public concerns in decision-making are not achieved in EIA in Ethiopia.

This study analyses the role of PP and integration of different actors in negotiating competing interests among different water users and the nature in Central Rift Valley of Ethiopia (CRV) in Ethiopia. The results of this case analysis have to be understood in the context of a centrally-led non-democratic country.

### THE CENTRAL RIFT VALLEY OF ETHIOPIA (CRV)

The Central Rift Valley of Ethiopia (CRV) (see Fig. 1-1) is located in an area with increasing irrigation development and decreasing surface water level. Cumulative impacts result in water scarcity and pressure on the ecosystems. Most of the irrigation schemes are extracting water from Lake Ziway and its tributary rivers through pumping and stream diversion, or from shallow ground water. In the 1980s no effective EIA was implemented for these private large scale irrigation schemes, neglecting consent of the local community and environmental offices.

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**Figure 1:**  
**Map of Central Rift Valley in Ethiopia<sup>3</sup>**

This uncontrolled water abstraction will degrade the CRV ecosystem in the foreseeable future<sup>4</sup>. The water level of Lake Ziway is decreasing by 0.5m since 2002 resulting in a reduction of the flow into the Bulbula River from 180Mm<sup>3</sup> to less than 50Mm<sup>3</sup> in an average year in 2003 and 2004, decreasing of Lake Abiyata by 60% of its original size, and raising conflicts between upstream and downstream inhabitants<sup>5</sup>. Application of agricultural chemicals and fertilizers in horticulture and floriculture will significantly pollute water bodies.

#### EIA SYSTEM AND PUBLIC PARTICIPATION IN ETHIOPIA

The initiation of the Conservation Strategy of Ethiopia in 1989, supported by the International Union for Conservation of Nature (IUCN) and the UNCED conference in 1992 in Rio de Janeiro, set a landmark for the inclusion of environmental right and sustainable development in the national supreme law<sup>6</sup>. As a result in 2002 the Environmental Protection Policy was promulgated and environmental protection organ (EPE) established. Later its competencies were decentralized to different environmental units and offices at federal and regional levels, and the EIA law was legally promulgated and enacted<sup>7, 8, 9,10,11</sup>. Decentralized sectoral units deal differently with environmental matter, which allows developers to bypass regulations. Environmental rights and sustainable development are entrenched in the Constitution in art.43, 44 and 92. The constitutional rights of active involvement of the general public (EIA actors and their main responsibilities) in the EIA process were clearly defined by the corresponding

environmental policy, environmental laws, draft EIA laws, regulations and guidelines.

As affirmed by the 2008 Directive issued by EPE to implement Proclamation No. 299/2002 art. 5, an EIA is mandatory for any irrigated area of 3000ha or more and any horticulture and floriculture development for export quality<sup>12</sup>. This proclamation further regulates in art. 3(1) that any licensing agency shall ensure, prior to issuing an investment permit or a trade or an operating license for any project, that the authority or regional environmental agency has authorized its implementation. The EPE must ensure public involvement in EIA and confirm this with a list of stakeholders' signatures and a letter from the woreda, which is in general not practically implemented. The loophole created by investment proclamation No. 375/2003 art. 24(5) reversed the EIA legislation No. 299/2002 art. 3(1)<sup>13, 14</sup>.

#### Objectives and research methodology

The main research objective was to analyse how public participation is applied in EIA of irrigation schemes in the Ethiopian case study of Central Rift Valley irrigation schemes at Lake Ziway (Figure 1). An analysis was carried out on Meki River on two Water Users Associations (WUAs) (Sambo Alaltu and Sambo Ganat) in Dugda woreda, Sher Ethiopia floriculture on Lake Ziway in Ziway town, and Castel Winery farm on Bulbula River in Adami Tulu Jidokombolcha (ATJK) woreda (Table 1). The irrigation schemes are representative of the woreda. Hardly any information exists about the EIA processes in the development of irrigation schemes in CRV.

No	Name of irrigation schemes	Year established	Types of crop	No. of workers	Owner	Status of EIA
1	Sher Ethiopia	2005	Flower and vegetables	15,000	Private foreign investor	EIA obligatory but not conducted
2	Castel Winery	2008	Grape	780	>>	EIA obligatory but not conducted
3	Sambo Genet and Sambo Alaltu	1980s	Fruits and vegetables	694	WUAs	Not mandatory EIA, no formal EIA conducted*

**Table 1: Description of the case study irrigation schemes**

(\*Water transfer from Lake Ziway to Meki River is mandatory to EIA though not conducted)

80 interviews were undertaken, out of which 44 interviewees are the local dwellers around the three irrigation schemes, 36 experts and management bodies from the local to national government, NGOs working in the research area, and developers. Focus group discussions with 23 inhabitants from upstream-downstream of Bulbula River were implemented. Document analysis and field visits supplemented gathered information<sup>15</sup>.

**Results**

**OVERALL PERCEPTION OF THE DIFFERENT INTERVIEWEES GROUPS**

All interviewees revealed that the farms are very poor in performing awareness creation for actors from the early inception of the program to date. The farms have no formal plan to mitigate adverse impacts of the projects. The involvement of stakeholders, particularly the local community, is generally poor.

**PUBLIC PARTICIPATION IN THE CRV**

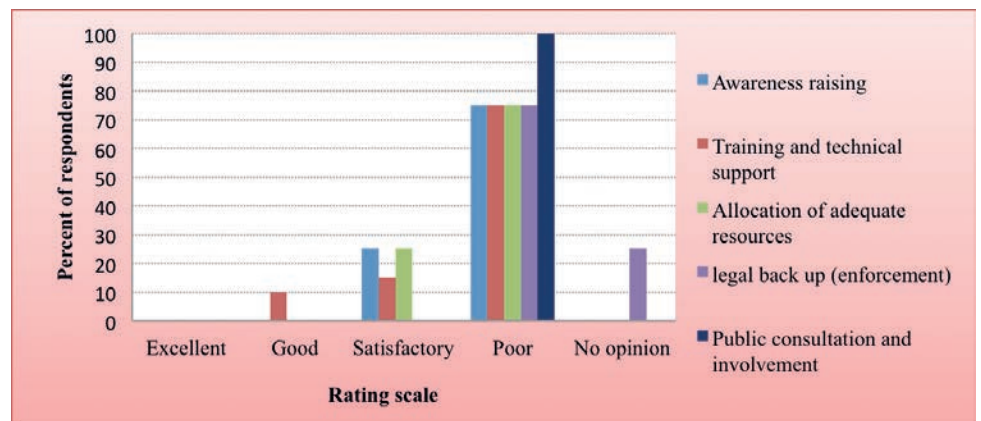
Public consultation and involvement: the local communities are not consulted on the establishment of the farms; their only source of knowledge about the farms is informal information from employees. Additionally they are not involved in planning and

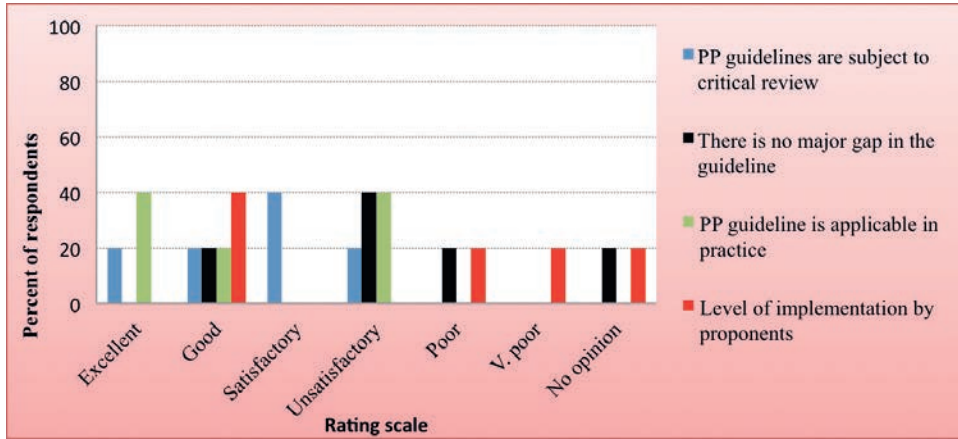
implementation of mitigation measures, which are unsatisfactorily implemented. The farms were introduced without a proper EIA with PP. However, WUAs representatives find that the members are strongly integrated in water and environmental management, conflict resolution, experience sharing, and enhancing economic benefits from irrigation development.

PP and access to information: efforts of developers to disclose their actions in environmental management to the public are poor. PP and access to environmental matters is very poor. However, the nation Ethiopia signed international environmental agreements and developed environmental policy and legislations. EPA provides environmental management plans and environmental information online.

Training, awareness raising and staffing: the farms were not offered training (Figure 2) for different actors to facilitate for farms’ activities and implement mitigation measures. Both farms have hired public relation professionals and Castel Winery has an environmental professional and 21 employees working on the environment. Though both farms basically promote a relation with the community and environmental development, their achievement is unsatisfactory, mainly due to poor commitment of developers and competence of the regulatory body.

**Figure 2: Status of environmental management actions in improving mitigation measures**





**Table 2:**  
**Recommendations to close gaps in the process and practice of EIA in Ethiopia** as regulated in the FDRE EIA Guideline (1995)

**Figure 3:**  
**Public participation guideline status**

Key impact identification: evaluation of the previous irrigation schemes PP in EIA shows public involvement in identifying key impacts and integration of public concern in EISR is missing in some projects. The public is not generally involved in the final review and decision of EISR, since time allocated is only 15 days. An inclusion of public comments into the final decision is bypassed, as type, location and size of the project and public interest are not addressed within the regulated time frame. For instance in Kenya EIS is published for two successive weeks in a Gazette notice and newspaper. The public has up to sixty days for an oral or written comment. Nigerian EISR review is done within 30 days.

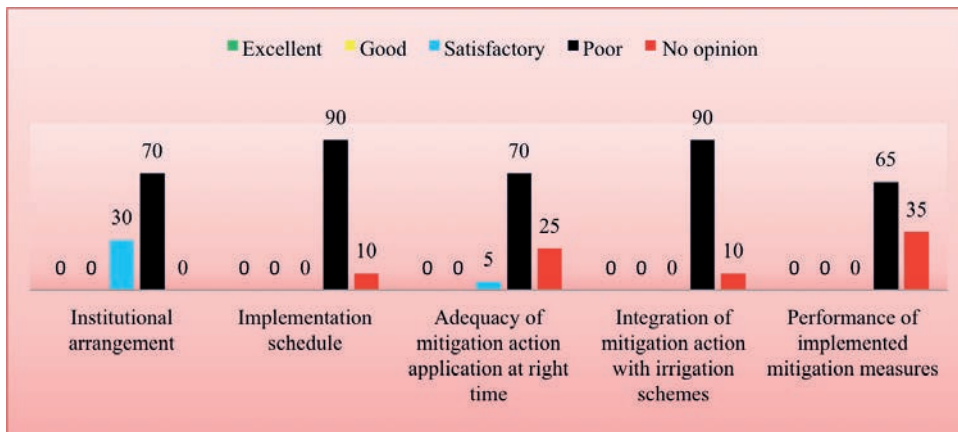
Budget, time and experts are constraining; the right of the public is bypassed and PPIs undermined. Although the English non-technical summary is not understandable for any layperson, the respondents rated it as above average.

PP guideline: an evaluation of the PP guideline in EIA revealed that identification methods and descriptions given for key actors are satisfactory. Managerial and technical capacity is in place to implement PP guideline, though this is weak in public involvement. Guidance given for consulting firms is insufficient, and accountability is not shared among citizens in challenging acts and omissions contravening environmental law (Figure 3).

**INVOLVEMENT OF PUBLIC AND STAKEHOLDERS IN IMPLEMENTING MITIGATION MEASURES**

The research showed that there are no plan and implementation schedules on what has to be done and how, poor initiation of developers to involve the public and stakeholders in implementing mitigation measures, and poor actions to reverse adverse impacts of the farms (see Figure 4). Implementation schedules and integration of mitigation actions with irrigation activities are generally poor. Though the farms make efforts to ensure their business competence on the international market, farms' technical capacity, technological accessibility and institutional capacity is insufficient, and 40% of the respondents are not aware of these. Additionally, a clear commitment to sustainable development, integrating the socio-environmental concerns equally with economic interests is lacking.

Regulatory organ: the regulatory organ at woreda level employs on average less than 50% EIA staff. Availability of computers, internet service and other communication facilities is unsatisfactory. Furthermore weak legal backup, absence of guidelines on EIA for floriculture and specific regulations are limiting the enforcement of mitigation measures of the farms. The Environmental Authority has a limited capacity to take legal measures on non-complaints to environmental legislation. There are no clearly set regulations and specific rules to support implementation of EIA



**Figure 4:**  
**Measures of adequacy of environmental management actions in present**

EIA in practice	Recommendations (to close the gap)
Lack of specific guidance of the public in the EIA process	Initiation of PP in every step of the EIA process and enhancement of transparency
Weak enforcement	Reinforcing EPA, integrating environmental and related sector institutions
Appeal procedure is limited to EPA or equivalent regional authority	Development of interdependence between different sectors on development actions that have adverse effect and set interlinked licensing procedure to avoid discrepancies
PP method to address projects with trans-boundary effect not clearly stated	Capacity building, awareness raising and better integration of environmental concerns into development
Method and time for final EISR revision procedure by IAP is not clearly defined	Sufficient time allocation for scoping report and EISR review; Establish EISR review mechanism by consulting the public
Limited time for evaluating scoping report (15 working days); EISR having limited resources	Development of independent PP guideline; EISR executive summary prepared in regional or national working language
No independent public participation guideline on EIA	Review and amendment of PP guideline in line with changing environment and international best practice
Assignment given for proponents to conduct EISR review may raise bias and lead to bypass	Involvement of concerned actors in the EISR evaluation process; Issuing specific regulations for some EIA Laws
Methods to publish environmental information and national report are missing	Any person shall have the right to lodge complaints to EPA or relevant regional environmental agency against any person causing damage to the environment; and to the court if not satisfied by decision of environmental authority
Lacks method to evaluate cumulative effects of the projects	Set EIA as a prerequisite prior to issue loan by any bank for EIA projects
Absence of a plan and clear responsibilities to update public participation guideline	Set a procedure for public instruments pass through EIA prior to application
Absence of stakeholders such as associations, vulnerable groups, religious institutions, CBOs	Approval of draft laws and promulgation of specific regulations, for instance, to penalize non-compliant with set preconditions during permit procedures
Permit procedure reversed	Define professional competence requirements for EIA consultants
EIA bypass for some projects	Reversing the permit procedure as set on proclamation No. 299/2002

**Table 2: Recommendations to close gaps in the process and practice of EIA in Ethiopia as regulated in the FDRE EIA Guideline (1995)**

proclamations. Review of environment related sectors' laws revealed there is weak or no consideration of EIA of projects. For instance, in the water sector law, provisions of permit for sustainable water sector development does not require EIA prior to issuing permit, though it is clearly stated as a mandatory requirement in the policy document of the sector<sup>16</sup>. Land Use Planning and Administration laws stipulate prohibition of investments in environmentally sensitive areas, but it is not stated in law that EIA is obligatory<sup>17</sup>. The Development Bank of Ethiopia requires EIA prior to giving loans, but developers can get loans without EIA.

#### INTEGRATION OF STAKEHOLDERS FROM DIFFERENT ENVIRONMENTAL INSTITUTIONS

Environmental units were established in different ministries following proclamation No.295/2002. Sectors implementing environmental activities are municipality, water resources, mining, agriculture and rural development, trade and industry and health. The current cooperation between different sector offices on environmental issues is insufficient, though structurally satisfactory. Bodies competent for fostering cooperation are busy with other official duties. As a consequence, developers receive permits without the consent of key stakeholders.

#### Conclusions and recommendations

Evaluation results of PP in irrigation schemes development of Sher Ethiopia and Castel Winery farms showed poor status of involvement, participation and consultation. The public is not informed and has no access to information on the farms; yet some efforts are emerging. There are no satisfactory efforts made by the developers and local administration to cooperate and build trust between the local community and developers unlike smallholder WUAs. Furthermore, reversal of investment law suppressed the enforcement of an EIA process with effective PP. Public involvement in key impact identification during the scoping and final decision of EISR stages is weak. No non-technical summary is available in a local language. The four weeks allocated for review of the scoping report and of the EISR are too short. Due to limited resources and staff the EISR review is outsourced. Consequently local knowledge is missing, PP in impact assessment is neglected, the right to access environmental information is undermined, PP in decision making is ignored, and public concerns are not integrated in the final decision. This leads to failure of the projects' sustainability.

### PUBLIC PARTICIPATION IN IRRIGATION WATER USE IN CRV OF ETHIOPIA

The Ethiopian PP guideline depicts involvement of the public in projects which have significant impacts on the environment and the social and economic wellbeing of the society. The range of stakeholders to be involved, their roles and responsibilities, licensing procedures, mechanism to ensure for public involvement, time limit for some activities in EIA procedure are stated in the guideline. PP guideline is rarely used by developers in executing EIA and it has major gaps such as a missing guide and methods of public participation, weak enforcement, limitation of appeal procedures only to EPA, ignorance of trans-boundary effect, limited time for scoping and EISR review, absence of independent PP guideline, lack of EIA guideline for some emerging projects as floriculture. Therefore, the guideline can be further improved (see Table 2).

### INTEGRATION OF ENVIRONMENTAL OFFICES, UNITS AND SECTORS

EIA guideline depicts the integration of EPA, bureaus and offices at different government hierarchy, environmental units and sector offices in EIA process. Methods of involvement are missing and description given not sufficient. Environmental institutions are insufficiently capable in human power and technological availability, and poorly integrated with horizontal and vertical environmental units and authorities to implement environmental laws and regulations. EPA has limited power to integrate federal government bodies and regional bureaus. Decentralization of EPA's responsibility to different environmental units and sectors with weak environmental enforcement seems not benefiting.

### IMPLEMENTATION OF MITIGATION MEASURES

Sher Ethiopia has no Environmental Management Plan and environmental professionals to conduct formal monitoring. The regulatory body (woreda) monitored once after five years in 2010. According to interviewees, this was only done for reasons of formality. Castel Winery, operational since 2008, employs environmental professionals and 21 workers engaged in environmental management activities. There exists no EMP and monitoring report. The regulatory organ raised as main challenges for monitoring the lack of awareness,

training and experts, budget and EIA guideline for floriculture. Planning and implementation of mitigation measures of adverse impacts of the irrigation schemes are not documented, nor accessible to the public. Technical and institutional capacity are below average in implementing mitigation measures, which are of poor quality when implemented.

### FURTHER RECOMMENDATIONS FOR IMPROVEMENT:

- A** EIA regulatory framework:
  - Raising the power of EPA among the federal and regional environmental units is crucial;
  - The regulatory organ needs to reinforce corresponding environmental offices and units with budget, skilled man power, materials, and regular training and awareness raising to update with improved scientific skills and knowledge;
  - An environmental court should be established;
  - Specific guidelines to enforce certain environmental laws should be developed including enforcement measures and clear mandates, the regular update of PP guidelines with changes in floriculture sector;
  - The regulatory body needs to define requirements for EIA consulting firms and introduce Environmental monitoring, evaluation and auditing for irrigation schemes.
  - Introduction of incentive mechanisms “carrot-and-stick” to initiate best performing investors and punish investors breaching environmental laws and regulations.
- B** Capacities of the main actors having a role in EIA:
  - The developers should commit themselves in introducing planned and regular public involvement in collaboration with the local regulatory body in implementing mitigation measures, farm management and development,

and incorporate their concerns in every aspect of a project.

- They need to strengthen public relations by interacting with the local community and other IAPs through e.g. public events and forums to develop transparency and trust.
- Horticulture and floriculture production quality certification is given based on farms' production performance. Though production sustainability can only be achieved through the involvement of the public, most farms are striving to achieve the requirements for certification to ensure their business competence on the global market. Thus the role of these certifications "Milieu Project Sierteelt" Floriculture environment project and Code of Practice (MPS and CoP) in integrating and strengthening PP in EIA of irrigation development is crucial. Irrigation water use in CRV is not consistent with different environmental and social implications, which need further study.

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## ABSTRACT

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Environmental impact assessment (EIA) in Ethiopia is legally adopted and applied since 2002. The procedures followed are in place. Public participation (PP) is part of the EIA process but remains weak in practice resulting in low awareness, lack of transparency and acceptance. This study aims to analyse a case study of weak public involvement in EIA in Ethiopia and provide some suggestions for improvement. Therefore, three irrigation schemes in the Central Rift Valley have been studied. We concluded that developers receive permits without the obligatory EIA and avoid the involvement of all key stakeholders. This situation is explained by the following causes. Firstly, there is a weak integration between and within environmental protection offices and environmental units of sector ministries. Secondly, the regulatory body has limited power and resources to enforce non-compliance of environmental laws and regulations. Therefore, we recommend to strengthen the capacity of reinforcing regulatory bodies, and to improve the integration between environmental authorities, environmental units and other line sectors. Additionally, revision and updating of the PP guideline is required.

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