

## INNOVATIONS

### **The Nature and Efficacy of Environmental and Social Impact Assessment in Bure Integrated Agro-Industry Park, North-West Ethiopia**

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#### **Abstract**

After the demise of the military regime, the development policy of Ethiopia has prioritized investment promotion to achieve development. But the expansion of investment projects caused acute ecological crisis and investment driven violence in the country. To balance investment promotion vis-à-vis sustainable development, the country enacted and enforced various environmental policies since 1997. This paper thus attempts to uncover the nature and efficacy of Environmental and Social Impact Assessment in Bure IAIP. To this end, a cross sectional research design was employed with a sample of 244 individuals chosen through simple random sampling. It used survey of stakeholders, focused group discussion and key informant interview to gather data from relevant sources. Data analysis and interpretation was done through statistics-by themes and side-by-side comparison through joint display mechanisms. The park undertook ESIA by teams composed of experts albeit its construction has begun prior to ESIA review. By discrediting environmental policies and proclamations, the park was commenced by the political decisions of elites from above. This indicates that the report has no relevance in the decision making process except preventing future criticisms. The Environmental and Social Management Plans and mitigation strategies have not been duly executed during construction and operation phases. The park administrator and environmental experts thus should dedicatedly work for the realization of environmental policies and proclamations to ensure environmental sustainability in the park for its success and social existence at large.

**Key words:** 1. Environment 2. EIA 3. Investment Promotion 4. Environmental Monitoring 5. Mitigation Strategies

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## 1. Introduction

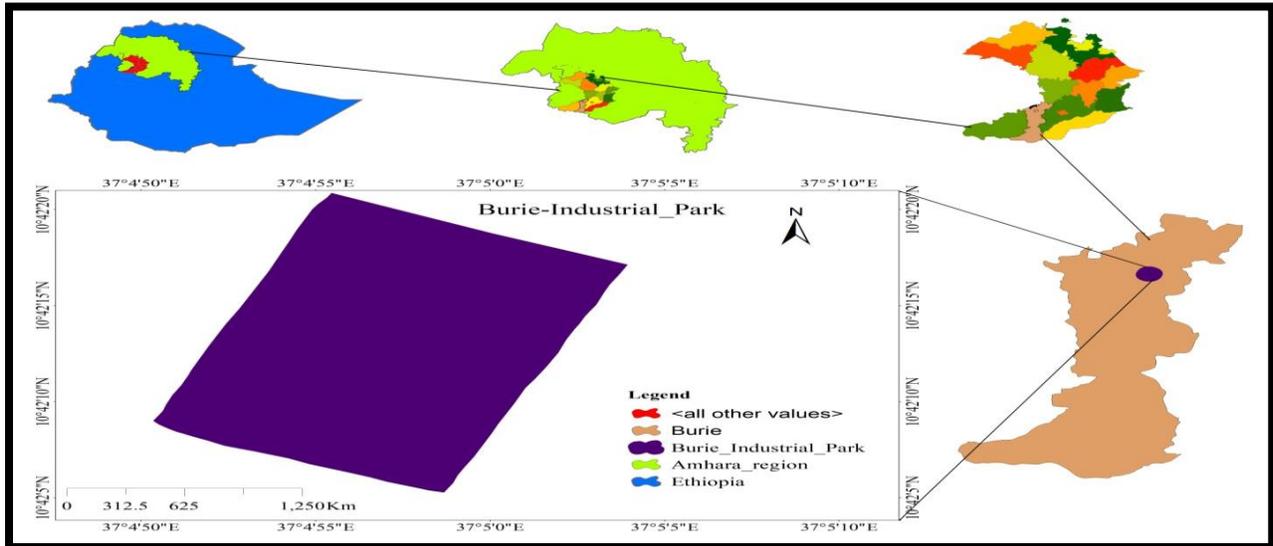
Driven by the developmental state economic model, Ethiopia is envisioned to elevate in the rank of middle income countries by 2025. To this end, the Ethiopian People Revolutionary Democratic Front (EPRDF) expanded commercial farms, manufacturing industries and hydraulic dams[1]. The political elites claimed that this developmental vision has brought astonishing economic growth over the last two decades. Nonetheless, the procedures of decision making and development planning have given solid priority for short term technical feasibility and economic benefits[2]. It deemphasized the issue of environmental sustainability in project evaluation and decision making mechanisms[3]. Consequently, the resources of the country are exploited unwisely in a way that jeopardizes environmental sustainability and livelihood opportunities. Practically, the developmental practices have failed to incorporate, configure and consider environmental issues on major development agendas[2]. The ill-designed and profit driven investment promotion undermined the environmental safety of citizens and brought grave ecological crisis due to the absence of environmental policy until 1997 [2, 4-7].

To address environmental crisis, Ethiopia adopted environmental policy in 1997 [2] that incorporated the key principles of environmental sustainability. The policy urged government authorities to undertake environmentally sound developmental projects to improve the quality of life[8]. It underscores the consideration of ecological, cultural, political, institutional and economic burdens of investment projects on the present and future generations. In doing so, the FDRE constitution reiterated the recognition of environmental rights of citizens and environmentally sound development practices. To that end, the country signed various multilateral treaties[6], and promulgated different environmental policies, laws and regulations. Institutionally, the Environmental Protection Authority (EPA) has been established to inspect, follow up and manage environmental impacts caused by projects during the construction and operation stages to modify and terminate their operation[9].

Basing the constitution, Ethiopia enacted an Environmental Impact Assessment (EIA) proclamation in 2002 to make investment projects environmentally sound[3, 10]. This proclamation is founded and shaped based on the Ethiopian Environmental Policy (EEP) enacted in 1997 [2]. The policy necessitates an appropriate EIA and environmental audit practices on projects to ensure the environmental rights of citizens. The feasibility of investment projects should be carefully examined and evaluated prior to commencement[5, 9]. Due to this, EIA is adopted as a formal process to identify possible impacts and investigate the feasibility of proposed developmental projects after learning its effectiveness from developed countries[3, 9]. It is an effective approach to evaluate the impacts of proposed projects on the environment and human beings to reduce negative impacts and ameliorate their design and sustainability [5, 11, 12] by identifying potential risks, mitigation and monitoring strategies. It is through the finding of EIA possible mitigating strategies have been developed and implemented to reduce risks with continuous monitoring about the effectiveness of projects. However, many argued that EIA has been conducted in Ethiopia as mere formalities rather than ensuring environmental sustainability. The Ethiopian government boldly claimed that it is adopted to ensure environmental sustainability and protect the environment from hazards[3]. This paper thus attempts to uncover the nature of ESIA report and efficacy of ESMPs on *Bure IAIP*, North-West Ethiopia.

## 2. Description of the study area

*Bure* Integrated Agro-Industry Park (IAIP) is located in North Western Ethiopia, *Bure* town. It is approximately far from Addis Ababa and Bahir Dar by 400 and 150 kms respectively. The area is selected for industrial development by considering the productive potential of the district. It is geographically found between 1182481.036 N to 1184267.076 N and 288737.915 E to 292314.594 E (UTM Coordinates) in West Gojjam Zone (see figure 1). The park has been resided in 260.56 hectares of land with a processing area of 245.23 hectare and 15.33 hectare of a non-processing area.



**Figure 1: Map of Bure Integrated Agro-Industry Park developed by authors**

## 3. Research Methods

### 3.1. Sampling Procedures

There are multiple rationales for the selection of *Bure* IAIP. There have been grievances and complaints raised by local communities about the failure of the project proponent on the execution of mitigation strategies and ESMPs. It is also the first and largest agro-processing plant found in Amhara region. And borehole extraction by the Amhara region Industry Parks Development Corporation (IPDC) was started without ascertaining the consent of *Zaba Tsion* kebele residents in *Jabi Tehnan* district. This unilateral decision caused popular violence and conflict between local residents and the park managers. Based on the nearness and influence of the park, 6 adjacent kebeles' and 20 villages were chosen purposely. The sample size of respondents was determined through [13] formula with 6% margin of error due to the largeness of the study population. To choose respondents for questionnaire, a simple random sampling technique was employed to provide equal chance for the study population after identifying potential villages purposefully. The total households of selected villages were 2000 based on the information obtained from kebele administration during the survey period. Besides, 5 percent sample households were added as a non-response rate. A total of 244 individuals were chosen as a sample for the study. Nonetheless, 12 individuals had failed to fill the questionnaire due to unspecified reasons.

### 3.2. Methods of Data Collection

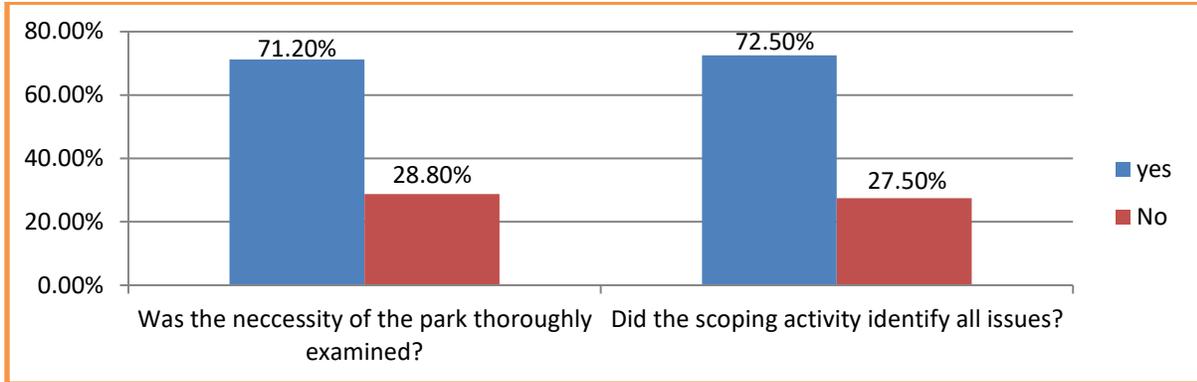
Key informant interview was employed with elders, environmental experts, project proponents and scholars to uncover their views about the efficacy ESMPs. The guidelines of interview were prepared before moving to the field work. We contacted the local people and found two field assistants that helped us to find informants and arrange FGDs. The key informants were selected based on their knowledge, life experience and role in the community. A total of 20 individuals were interviewed until the data reached saturation point. Besides, FGD was employed with local communities affected by the park to gain an insight about the efficacy ESMPs. A total of 2 FGDs were undertaken by being careful to the traditions and customs of participants. And household survey was conducted from 01 March to 30 April 2021. Basically, the questionnaire was dispatched to flanking communities, investors and employees of investment projects on the issue under investigation.

### 3.3. Methods of Data Analysis

The data collected through questionnaire was analyzed by simple descriptive statistics. The qualitative data was coded and condensed into specific themes and analyzed thematically. After doing so, the two data sets were integrated at the analysis and interpretation section based on identified themes.

## 4. Results and Discussion

EIA is a multi-stage process that involves a wide range of issues while the pre-feasibility and feasibility of investment projects can be judged[14]. The overall effectiveness of an EIA is measured and evaluated based on the specific steps involved in reviewing project proposals[15]. Initially, the overall nature of IAIPs was thoroughly examined and understood to better scrutinize the necessity of the developmental project to the nation and its people. The Amhara regional government together with the Ministry of Trade and Industry (MoTI) decided the necessity of *Bure* IAIP for the country. Similarly, 71.2 percent of respondents revealed that the park was found to be important to achieve national food security and generate hard currency. It is considered as a pinnacle to fill the export gaps of the country largely dominated by unprocessed agricultural crops and raw materials. It is further anticipated that the inception of *Bure* IAIP will bring balance of trade by adding value on agricultural yields and other raw materials. Inversely, 28.8 percent of respondents responded that the necessity of the park was not adequately examined (see figure 2) rather it was commenced by the unilateral decisions of state elites. However, government officials asserted that the necessity of the project was thoroughly examined by concerned policy advisors of the regime and government bodies.



**Figure 2: the perception of respondents about the necessity and scoping activity of the park**

After the necessity of IAIPs was decided, the MoTI collected information on the nature of the proposed developmental project to undertake scoping activities. Based on the data about the nature of IAIPs, important boundaries, expected impacts and reasonable alternatives were established and identified prior to the undertaking of ESIA review. Taking the nature of IAIPs as granted, the Amahara region IPDC had decided to undertake a full scale EIA. This is because scoping is undertaken after a decision passed to conduct a full scale EIA on the proposed investment projects. At the scoping stage, responsible bodies try to evaluate and reach a consensus on a range of issues to be analyzed in the EIA process of *Bure* IAIP. The scoping of *Bure* IAIP, however, was decided by state elites from above without the involvement of environmental conservation experts. It is found that there was no stakeholder engagement when the boundary of an EIA was established. However, scoping should involve and consider potentially affected groups, reasonable alternatives, determine appropriate methodologies, evaluate concerns and understand local values[16]. Nonetheless, the majority of projects in Ethiopia have passed without undertaking proper and effective ESIA process[14].

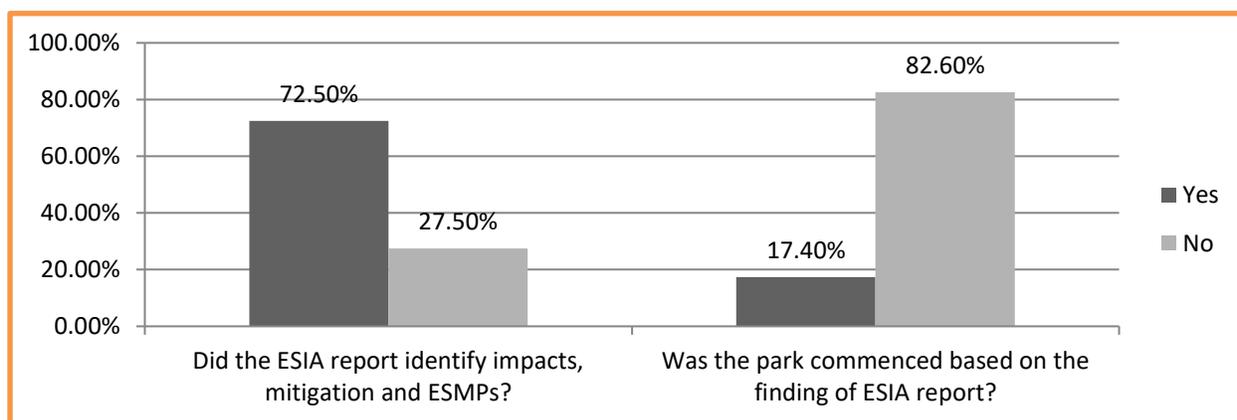
#### 4.1. The Nature of ESIA Review Process of *Bure* IAIP

Agro-industry parks are state owned projects, whose ESIA was investigated under the auspices of MoTI. The design, feasibility study and business plan of IAIPs was carried out by Mahindra Consulting Engineers (MACE). Similarly, the ESIA of IAIPs was studied by national and international experts at the country level. But the environmental reviewing process of each industry park was undertaken based on the unique context of the area. The ESIA of *Burie* IAIP was undertaken by Zeru Girmay Environmental Consultancy in collaboration with WSP environment and energy Africa to obtain environmental certification. The review was conducted by a licensed agency with a committee composed of experts of social, economic, environmental, environmental health, water and temporal asset governance analyst. The team employed interview, field survey and desktop review as a strategy to garner reliable data and analyze the impacts of the proposed project by the clear criteria devised under the auspices of EPA. But the licensed agency’s reviewing system was influenced by the vested interest of the project proponent. This was because environmental consultants were hired and paid by the project owner, which compelled them to approve the project. This contributed to the ESIA review of *Bure* IAIP being unnecessarily inclined to the vested interest of IPDC.

**Table 1: The Determinants of ESIA review of Bure IAIP**

| Items   | Frequency |     | Percent |
|---|-----------|-----|---------|
|   | Yes       | No  |         |
| Did the ESIA report undertaken by strong technological, human and financial capacity? | Yes       | 30  | 12.7    |
|   | No        | 206 | 87.3    |
| Did the ESIA report undertaken by strong institutional and regulatory frameworks?     | Yes       | 27  | 11.4    |
|   | No        | 209 | 88.6    |
| Did the ESIA report carried out by strong stakeholder coordination?                   | Yes       | 24  | 10.2    |
|   | No        | 212 | 89.8    |
| Did the ESIA report carried out without unnecessary political interference?           | Yes       | 30  | 12.7    |
|   | No        | 206 | 87.3    |

In Ethiopia, the expansion of investment projects is motivated by short term technical feasibility and economic gains in contrary to environmental sustainability [2, 9, 10]. Concerning the nature of the ESIA review of *Bure IAIP*, 87.3 percent of respondents asserted that the ESIA review was not done vis-à-vis strong technological, human and financial capacity (see table 1). As eloquently explained by district and provincial environmental experts, there was neither strong stakeholder coordination nor strong institutional regulatory framework during the undertaking of ESIA review of *Bure IAIP*. Evident to this, 89.8 and 88.6 percent of respondents witnessed that the ESIA process of *Bure IAIP* had lacked stakeholder coordination and institutional regulatory frameworks respectively (see table 1). Additionally, 87.3 percent of respondents replied that the ESIA report was influenced by political intervention of state elites (see table 1). This is because the development plan and practice of Ethiopia is inspired by short term economic gains. This influenced development planners to give priority for economic growth in the decision making procedures of *Bure IAIP*.



**Figure 3: the perception of respondents about the ESIA review and decision making process**

As indicated in figure 3, 72.5 percent of respondents replied that the ESIA report of *Bure IAIP* identified potential impacts, alternatives, mitigation strategies and ESMPs. Inversely, 27.5 percent of respondents revealed that the review process had not adequately identified impacts, mitigation strategies and ESMPs (see figure 3). Nevertheless, the ESIA report witnessed that impacts like loss of access to agricultural land and residential buildings, change in land use and land capability,

hazardous waste, livelihood deprivation, risk of soil erosion, sedimentation, dusty and dirty road, loss of top soil, environmental noisy, soil compaction, ground water contamination, degradation, noise climate were identified during construction. But sedimentation, livelihood deprivation and groundwater contamination have remained risks throughout the project cycle. As mitigation strategies, the report identified job opportunities, payment of compensation and reallocation of land for displaced and project affected people to livelihood deprivation, physical and economic displacement. The report recommended revegetation of indigenous plant species and construction of terracing in the buffer and greenery areas of the park to mitigate impacts of soil erosion and climate change. It is also planned to undertake frequent monitoring for water use and pollution in the future to limit residual effects on other water users and aquatic eco-systems. The park developed ESMPs to execute proposed mitigation strategies like terracing, regular inspections, placement of soil stockpiles, settlement of ponds, silt fences and topsoil stockpiles.

The participation of the public in the ESIA process is a critical component to ensure transparent decision making. It is an important component of ESIA preparations to mitigate conflict, gaining important information and mutual understanding as a means to avoid possible delays[17]. Similarly, Ethiopian citizens have a right to full consultation, participation and expression of their views in the planning and implementation of projects affecting their lives[18]. Linked to *Bure IAIP*, local communities and other stakeholders had participated at the different phases of the ESIA albeit participants were involved on the basis of their political affiliation. This implied that the ESIA report neither incorporated the concern of flanking communities nor presented to and commented by environmental experts and surrounding communities. In contrast, the proclamation underscores the need of consultation when development projects have been planned to be commenced. This clearly indicated that the park undertook ESIA to obtain certification to avoid future criticisms.

After ESIA review, the report was submitted and presented to authorize agencies for decision making. The legal frameworks of the country have obliged project proponents to commence investment projects as per the finding of ESIA report. In contrast, *Bure IAIP* was commenced by the mere decision of politicians from above prior to the undertaking of ESIA review. The ESIA report indicated that the collection of baseline data was undertaken by the consultant from 9 August to 20 September 2017. Then, the scoping report was submitted to the Ministry of Environment, Forest and Climate Change (MoEFCC) for approval on 6 December 2017. However, the Amhara region IPDC has begun construction of *Bure IAIP* in 2016. This connotes that the park was begun by the decisions of government officials to ensure national food security and generate foreign currency. It was launched by top-down approach without undertaking ESIA review. Concomitantly, 82.6 percent of respondents responded that the park was not embarked by the finding of the ESIA report (see figure 3). However, legal frameworks obliged government authorities to pass decisions about proposed projects based on the adequacy of the ESIA report [16]. The undertaking of ESIA of the park was totally dominated by government officials and assigned experts. Thus, the overall process of the ESIA review process was carelessly undertaken to fulfill legal preconditions for certification.

**4.2. The Execution of Mitigation Strategies and ESMPs in Bure IAIP**

Environmental monitoring is an integral component of the project cycle and a decisive mechanism to control impacts and effective environmental management. This is a stage where regulatory environmental agencies are audited, supervised and monitored investment projects during construction and operation phases [16]. Environmental regulatory experts and environmental management units have employed compliance and effect monitoring plans to undertake environmental monitoring. The effectiveness of monitoring and supervision of the operation of projects requires the concerted efforts and coordination of various stakeholders[14]. Compliance monitoring has undertaken to inspect the performance of recommended mitigation and management plans by the project proponent during construction and operation phases. Impact monitoring strategies have already been identified in the project design of ESIA and ESMP documents. EEP has recognized the role of sound operation of investment projects to ensure sustainable development and to attain a clean environment for the public by efficient monitoring strategies[3].

**Table 2: The perception of respondents on the efficacy of mitigation and ESMPs in post authorization**

| Items   | Frequency |     | Percent |
|---|-----------|-----|---------|
|   | Yes       | No  |         |
| Are mitigation and ESMPs executed effectively after post authorization?                               | Yes       | 48  | 20.3    |
|   | No        | 188 | 79.7    |
| Are mitigation strategies and ESMPs implemented without political interference?                       | Yes       | 48  | 20.3    |
|   | No        | 188 | 79.7    |
| Are mitigation strategies and ESMPs implemented by strong government follow up?                       | Yes       | 20  | 8.5     |
|   | No        | 216 | 91.5    |
| Are there strong stakeholder coordination to execute mitigation and ESMPs in the park?                | Yes       | 30  | 12.7    |
|   | No        | 206 | 89.8    |
| Are there ethical and dedicated environmental experts to supervise the practice of ESMPs by the park? | Yes       | 27  | 11.4    |
|   | No        | 209 | 88.6    |
| Are there clear monitoring strategies to supervise the implementation of ESMPs?                       | Yes       | 24  | 10.2    |
|   | No        | 212 | 89.8    |
| Are there adequate regulatory bodies supervising the practice of ESMPs in the park?                   | Yes       | 30  | 12.7    |
|   | No        | 206 | 87.3    |

For environmental sustainability, the ESIA report recommended an independent environmental control to undertake a monthly audit of the park based on agreements ratified in the environmental certification. The EIA proclamation number 299/2002 article 12(1) stated that an authorized regional environmental agency has the power to monitor and evaluate compliance of projects performance as per obligations imposed on the investor at the time of authorization[3]. Under this legal framework, visual observation and site investigation are the most frequent monitoring strategies employed to

inspect the enforcement of recommended mitigation strategies and ESMPs during construction and operation stages in *Bure IAIP*. There are environmental experts authorized to inspect, audit, and follow up the operation of the park in conformity with environmental policies at all governmental hierarchies. Nonetheless, investors joining the park have failed to execute ESIA reports during construction and operation phases. To the worst, there are projects running their own business without being environmentally feasible due to the reluctance of government authorities to execute environmental policies. Concomitantly, 79.7 percent of respondents revealed that investors have failed to seriously execute mitigation and ESMPs during construction and operation stages. Inversely, 20.3 percent of respondents replied that project proponents have enforced ESMPs after authorization (see table 1). There was extreme dust release, obstruction of road and flooding that engendered soil erosion on neighboring communities during construction. The main access road and footpaths of local communities had been obstructed during the phase of construction. Moreover, the agricultural crops, fruits and vegetables of adjacent communities had been damaged by floods that come from the project site. The mitigation strategies of flood control through construction of ditch was not done vis-à-vis the inception of the park. To rectify non-compliances of the project, concerned regulatory environmental experts have obliged to submit the audit report of the project to IPDC and MoEFCC. But regulatory environmental bodies have not yet submitted reports about the drawbacks of the park in executing ESMPs.

After decision making and construction of *Bure IAIP*, investors launched businesses without having their own independent ESIA review. Typically, Richland Bio-Chemical production PLC has started business without having its own ESIA report. The firm has engaged in production of Bio-Chemical and Agro-Processing products within 21 hectares of land to produce Soy and Corn oil with the aim to generate foreign currency and meet the growing demand of locally produced edible oil for the country. In contrary to legal frameworks, private investors in *Bure IAIP* were unhappy to undertake another ESIA review contextual to their business venture. These investors argued that ESIA of the park had already undertaken by experts at the national level by IPDC. Investors have allowed starting business at *Bure IAIP* prior to the construction of treatment plant that hoards hazardous toxic wastages emerged from various business entities within the park.

The Amhara region IPDC is not that much strict on legal prerequisites when investors have started business at the park. By considering the desire of investors, the park administrator has discredited environmental laws to attract potential investors. The regional IPDC further argued that the strict observances of legal principles on the operation of the park will make investment attraction very difficult. In Ethiopia, investors ultimately focus on maximization of profit with a minimum transaction cost, and they labeled the undertaking of another EIA contextual to their business as wastage of capital. An interviewee had to say:

*.....investors joining Bure IAIP are disinterested to undertake ESIA specific to their business venture. They aspired to maximize profit with a low transaction cost and considered the undertaking of EIA as an economic wastage. The majority of investors have given priority for economic profit. Moreover, the undertaking of EIA is labeled by investors as a restrictive criteria aimed to gobble up capital. They further regarded the pressure of concerned environmental experts to carry out EIA as an economic exploitation, bottleneck of development and progress (20 March 2021).*

To address the existing challenges, the park administrator has undertaken contract with investors to boost the potential of *Bure IAIP*. The Amhara region IPDC, driven by economic gains and investment promotion, has allowed investors to start production in contradiction to environmental policies. The regional IPDC argued that investors will be forced and supported to undertake ESIA review contextual their business after they begun operation and took contract. It planned to stretch a huge sewage and effluent treatment plant in the western side of the park to hoard all hazardous toxic wastages. The Park, however, failed to build treatment plant before investors have started business due to the unavailability of materials at the country level.

The ESIA report of *Bure IAIP* anticipated that waste water produced by the park will be treated and recycled in operational phases. The sanitary wastewater from toilets and urinals are planned to be collected in an underground sewer system to process the plant's sanitary facilities. For sustainable development, investors have contracted to build primary treatment plant as per the nature of their business venture prior to the beginning of production. However, some investors have begun production at the park without the construction of treatment plant. This precipitated environmental pollution on adjacent communities by releasing toxic wastes on the nearby river without treatment. These contradictory actions of investors against ESMPs created public grievance and complaints on flanking communities of *Bure IAIP*. This revealed that the operations of investors are in contrary to mitigation strategies identified in the ESIA report. To rectify residual effects of the park, the regional IPDC has the duty to monitor *Yiser River* on monthly basis upstream and downstream to the park through laboratory testing. However, laboratory testing has not yet employed to monitor the water use and pollution of the *Yiser River*. Furthermore, environmental monitoring of site activities in the park was not done either by set of inspection reports or incident forms. There has been non-conformity and breach of environmental policies to execute ESMPs by project proponents during construction and operation phases. Hence, the current operation of *Bure IAIP* has contradicted with environmental policies, proclamations and ESMPs.

The ESIA report indicated that the vicinity of *Bure IAIP* lacked adequate water supply network due to the overdependence of farmers on *Yiser River* for agricultural activities. Due to the impossibility of withdrawing water from *Yiser River*, the ESIA report proposed a network of bore wells sunk in and around *Bure town* to supply water for the park. This coerced the regional IPDC to supply water for *Bure IAIP* sourced through borehole extraction. To this end, the park administrator has begun borehole extraction in *Zaba Tsion Kebele* of *Jabi Tehnan* district around irrigation dams constructed by local communities. However, the regional IPDC has begun borehole extraction in the kebele neither undertaking public deliberation nor ascertaining popular consent. This created fear of water depletion and drying of streams contributing to the *River* on water users which caused popular oppositions in the kebele. This is because the irrigation dams are considered as a pinnacle to ensure food security and improve their livelihood basis. Driven by emotionality and suspicion, local residents and youths have attempted to attack kebele administrators due to their allowance of borehole extraction without public deliberation. An interviewee noted that:

*...the place where borehole extraction undertaken is very near to irrigation dams serving local communities from antiquity. Through these small dams, we local residents have been engaged in production of coffee, vegetables and fruits. But the unlawful abstraction of groundwater by the Park will dry streams contributing to the River. The government has not consulted local communities while *Burie IAIP* started borehole extraction. The decision of borehole extraction is*

*arbitrarily done irrespective of public consultation and consent. This caused the occurrence of conflict between local communities and the regional IPDC (30 March 2021).*

The residents of *Zaba Tsion* kebele perceived that the uncritical borehole extraction will cause drying of coffee, vegetables and fruits cultivated in the area through irrigation dams. Prior to borehole extraction, legal frameworks obliged state authorities to consult project affected communities when a certain course of action is planned to be undertaken. However, the unplanned actions of the Amhara region IPDC brought wide public uproar and violence. To hide failures, the regional IPDC and the different government hierarchies associated the questions and oppositions of residents with politics to create frustration by labeling them as anti-development and anti-peace. However, the opposition of local communities against borehole extraction was caused by top-down decisions of government authorities and Amhara region IPDC. Evidences showed that the inception of developmental projects by denying the rights of local communities is prone to investment driven violence.

Above all, investors joining Bure IAIP have failed to submit reports about the performance of their projects to regulatory government bodies. However, the ANRS Environmental, Forest and Wild Life Conservation and Development Authority EIA regulation number 001/2018 obliged investors to submit reports twice annually to environmental conservation experts. In *Bure IAIP*, private investors were disinterested to clearly report about the actual deeds of their project. This operation of private firms is contrary to environmental policies and monitoring strategies. The Amhara region IPDC has not submitted the copies of ESIA report to district and provincial environmental regulatory offices, which in turn makes the monitoring strategies very tiresome.

The execution of ESMPs and monitoring strategies were obstructed by lack of stakeholder coordination, government follow up and dedicated environmental experts. In post-authorization of *Bure IAIP*, none of the district and provincial environmental experts audited, supervised and monitored the operation of private firms joining in the park. Concomitantly, 88.6 percent of respondents revealed that the execution of mitigation and monitoring strategies were compromised by lack of committed and ethical environmental experts (see table 1). Similarly, 91.5 and 89.6 percent of respondents replied the non-existence of government follow up and stakeholder coordination to execute mitigation and ESMPs in *Bure IAIP* at the construction and operation phases respectively. And 89.8 and 83.7 percent opined that the unclarity of monitoring strategies and inadequate regulatory bodies obstructed the efficacy of mitigation and ESMPs in *Bure IAIP* (see table 1). Furthermore, 79.7 percent of respondents affirmed that the efficacy of ESMPs of the park was impeded by excessive political interference of state elites. An interviewee stated that:

*...the intervention of politics is the greatest impediment of environmental experts to discharge their duties. When environmental experts have remained stick on legal frameworks, they dubbed as anti-development by associating their professional duties with politics. This is deliberately done on environmental experts to simply accept project proposals without strict adherence of environmental laws and proclamations. Some high ranking government officials have unashamedly pressurized environmental experts to license unfeasible developmental projects (16 April 2021).*

Driven by short term economic gains and job creation, politicians have prioritized investment promotion regardless of environmental sustainability. Intermittently, the intervention of politics in environmental decision making is demonstrated when political elites compelled experts to approve

project proposals without ESIA report. Due to the meddling of politics, investors have continued to run production in *Bure IAIP* neither having an independent ESIA review nor becoming environmental friendly. The efficacy of ESIA report and ESMPs was obstructed by the absence of an independent environment conservation office with its own political executives. During the field survey, environmental conservation was a sub-branch under the Rural Land Administration and Use Offices at district, provincial and regional levels. This practically created difficulty to implement environmental policies and proclamations on developmental projects of the region. To this regard, the absence of an independent and politically appointed executive to environmental conservation at regional, provincial and district administrative levels has weakened its capability to execute environmental policies and proclamations. Cognizant of such reality, the environmental conservation office has remained toothless to control investment projects which are unfriendly to environmental sustainability. Generally, the execution of ESMPs were constrained by lack of awareness about environmental laws, shortage of environmental experts, mere maximization of profit and investment promotion, shortage of finance by regulatory bodies, failure to fulfill infrastructural development and lack of coordination among different stakeholders.

### **Conclusion**

To realize sustainable development, environmental issues have been duly recognized by various international conventions, national laws and proclamations. It is acknowledged that the mere promotion of developmental projects for economic reason has engendered grave ecological crisis and affected the environmental rights of citizens. To reverse environmental problems, Ethiopia adopted EIA proclamation in 2002 that urged project proponents to undertake ESIA review prior to the inception of investment projects. Based on the legal frameworks of the country, *Bure IAIP* has been commenced as a huge state-owned agro-industry by MoTI. Nonetheless, the project site was unanimously determined by state elites through top-down approach prior to the undertaking of ESIA review. It was started by the decision of state elites before the completion and beginning of ESIA reviewing. The ESIA team had undertaken review when the construction of the park has already begun. This clearly indicates that the decision making process of *Bure IAIP* was not passed in accordance with the major finding of the report. Moreover, the mitigation strategies and ESMPs of the park have not been effectively executed due to excessive political interference, weak stakeholder coordination, undedicated environment regulatory body and mere focus of the regime on investment promotion. This revealed the presence of non-conformity to execute ESMPs and environmental policies by the park administrator. Thus, the current operation of *Bure IAIP* has contradicting environmental policies and environmental management plans to ensure environmental sustainability.

### **Abbreviations**

EIA=Environmental Impact Assessment  
ESMP=Environmental and Social Management Plan  
EPRDF=Ethiopian People Revolutionary Democratic Front  
FGD=Focused Group Discussion  
IAIP=Integrated Agro-Industry Park  
IPDC=Industry Parks Development Corporation  
MACE=Mahindra Consulting Engineers

### **Availability of data and materials**

Sharing available data and material is partially restricted

### **Competing interest**

The authors declare that there is no any financial and non-financial competing interest.

### **Funding and sponsorship**

No funding or sponsoring organization for the study.

### **Authors' contribution**

Asabu Sewenet Alamineh: initiating, conceptualizing, gathering and organizing, editing, revising and approving the subsequent draft of the manuscript until submitted.

Birhanu Bitew Geremew: writing, editing, Revising, gathering data, and approving the subsequent draft of the manuscript

### **Availability of data and materials**

We have sent all important and available data with this manuscript. We are not interested to share the row data because we have undertaking another study linked with this study.

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