Environmental Impact Assessment

1. What is meant by EIA?

Ans. Environmental Impact Assessment is a formed process for identifying likely effects of activities or projects on the environment, and on human health and welfare. Also, for identifying means and measures to mitigate & monitor these impacts.

2. What is the significance of EIA in the present scenario?

Ans. The significance of EIA in the present scenario is:-

(i) EIA is more than technical reports, it is a means to a larger intention - the protection and improvement on the environment quality of life.

(ii) EIA is a procedure to identify and evaluate the effects of activities on the environment - natural and social.

(iii) EIA is not a science but uses many sciences in an integrated inter disciplinary manner evaluating phenomena and relationships as they occur in the real world.

(iv) EIA should not be treated as an appendage, as add-on to a project, but be regarded as an integral part of project planning.

(v) EIA doesn't give decisions but its findings should be considered in policy and decision-making and should be reflected in final choices.

3. Explain the Key proces in EIA?

Ans. The eight steps of the EIA process are presented below:

- Screening: First stage of EIA, which determines whether the proposed project, requires an EIA and if it does, then the level of assessment required.

- Scoping: This stage identifies the key issue and impacts that should be further investigated. This stage also define the boundary and time limit of the study.

- Impact analysis: This stage of EIA identifies and predicts the likely environmental and social impact of the proposed project and evaluates the significance.

- Mitigation: This step in EIA recommends the actions to reduce and avoid the potential adverse environmental consequences of development activities.

- Reporting: This stage of EIA presents the result of EIA in a form of a report to the decision making body and other interested parties.

- Review of EIA: It examines the adequacy and effectiveness of the EIA report and provides the information necessary for decision making.

- Decision making: It decides whether the project is rejected, approved or needs further change.

- Post monitoring: This stage comes into play once the project is commissioned. It checks to ensure that the impacts of the project do not exceed the legal standards and

implementation of the mitigation measures are in the manner as described in the EIA report.

Q. Write down a case study on EIA.

Kol - Dam Hydropower project

- Type of project:
The Kol dam Hydropower project is a national level hydropower project which was developed by National Thermal power Corporation (NTPC) in the early 2000s. The main purpose of the dam is hydroelectric power generation and it will support ~~66~~ 660 MW power station.

- Location of the project: Kol dam hydropower project is located between 31°21'54" to 31°05'13" N latitude and 76°51'31" to 77°23'51" E longitude on Satluj river, 18 Kms from Bilaspur near Barmana, Himachal Pradesh.

- Description of EIA report of the Kol - Dam hydropower project:

① Study Area:- Kol-Dam hydropower project is located between 31°25'54" to 31°05'13" N latitude and 76°51'31" to 77°23'51" E ~~lat~~ longitude on ~~sta~~ Sutlej river in Himachal Pradesh. It covers some parts in Mandi and Bilaspur of the state.

(2) Sampling and Data Collection:-

The study based upon the ~~primary~~ primary information collected through field survey by doing proportionate random sampling of villages. Multistage simple random sampling technique was used to select study area finally 5 target villages were selected. 10% household were selected randomly in each village and a ~~pretes~~ pretested questioner was used as a tool for gathering the information on socio-economic aspects like loss of assets; land holdings; cropping pattern livestock inventory etc.

(3) Analytical framework:

The primary data so collected during study period were checked, scrutinized, coded, tabulated, analyzed, compiled and presented systematically by using simple tabular method. The ~~resul~~ results have been presented by working out simple averages and percentages depending upon the requirement of the study.

(4) Results and discussion:-

Land is the basic resource, which can be allocated for different farm and non-farm activities for maximization of household income depending upon its nature and type. Land inventory and its ~~ut~~ utilization pattern, before and after project implementation period in the sampled household have been analyzed. of revealed that there was a loss of total land holding per family in range of 33.07 and 64.46% in affected vilages. However in case of cultivated land there was a loss in the range of 36.15 to 67.36% in sampled vilages. In case

of pasture max loss of 60% was in Kasol. It was recorded minimum (7.5%) for village Jomthal. Similarly it had also reported that 1600 hectare of cultivable land and 2000 hectare Uncultivable posture land occupied by Tehri dam project in Garhwal Himalyas of Uttarakhand. Total area under crop was decreased in the range of 67.36 to 36.15% in affected villages. It is evident that 83.24% of timber tree population was lost in village Kasol followed by Kyan (44.07%), Ropa (37.45%) and Jomthal (34.18%). Execution of the project work has accelerated extinction of flora as compared to before project implementation periods.

Conclusion:-

It has been concluded that present investigations that dam construction have resulted in loss of on farm income sources like agriculture & land, farm land trees and live stock population as well as associated income of project affected families from these resources was also affected in study area.

Refrences:-

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