

Strategic thinking SEA in Perú – Results from recent pilot cases

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1. Introduction

In recent years the practice of Strategic Environmental Assessment (SEA) in Perú is seeking innovative ways, through strategic thinking-based SEA, to encourage more integrated policy and planning decisions towards sustainability.

Since about the year 2000, bilateral and multilateral donors and the Organisation of Economic Co-operation and Development (OECD) acted as main drivers for SEA for policies, plans and programmes (PPP) in countries of the Global South such as Peru. The legal framework for SEA in Peru has been grounded in the EIA legal framework (National Environmental Impact Assessment System, SEIA Act, 2001), which does not help in making SEA a more strategic instrument. While not yet regularly practiced in Perú, since 2009 SEA is required through regulatory framework.

Reviews of SEA experience in Peru have revealed that earlier practice was mostly informal, in most cases incomplete, and followed an EIA-based approach. The Loreto Plan SEA stands out as the single SEA case completed in Perú during this initial stage.

Since 2014, the Peruvian Ministry of Environment (MINAM), with the support of the German development cooperation, implemented by the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) GmbH, have been strengthening SEA practice, promoting the development of SEA pilot cases, following a more strategic thinking methodology. These efforts were made within the framework of the OECD 2016 environmental review for Perú ([OECD, 2017](#)) which recommendations emphasized the need for a systematic practice of SEA in key policies, plans and programs.

This paper summarizes results of recent experience with SEA pilot-cases in Perú, using strategic thinking-based SEA.

2. Strategic thinking methodology

Although SEA comprises numerous methodological approaches, depending on different planning instruments or levels (tiers) of decision-making (notably policies, plans and programmes), two main methodological approaches to SEA stand-out. The first follows the rationalism paradigm of impact-assessment and is often named in the literature as traditional SEA, EIA-based or EIA-like SEA. Here the logical thinking is to control the effects of development on the environment, with the assessment focusing on the effects and respective mitigation measures once development proposals have been formulated or designed.

Opposite to that approach, and following a more constructivism paradigm, is the strategy-based or, more specifically, the strategic thinking SEA as proposed by [Partidario \(2012\)](#). Here the aim is to build development futures based on the potential environmental values and conditions. This means that SEA promotes the environment as an integrative and constructive ingredient in strategically setting conditions for development, helping to create development options that encourage these strategic conditions and also assessing whether these conditions are being considered in development processes.

The three pilot SEA cases described in this paper followed the Strategic Thinking for Sustainability (ST4S) methodology by Partidário ([2012](#); [2021](#)). This methodology uses strategic thinking to:

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- Create space for opportunities and contexts for development to be sustainable.
- Be proactive to policy and plan conceptualization and facilitate constructive futures drawing on the added value created by natural and social capital.
- Be founded on dialogues with relevant stakeholders to build sustainable futures (priorities, options, opportunities and risks, recommendations).
- Assess the opportunities and risks of strategic options for sustainability, led by a long-term vision, before actions or operational proposals are formulated.

In the ST4S methodology SEA has a supporting role in the design of strategies, not only to inform but, especially, to help search for more integrated and sustainable options. SEA with a strategic approach supports the decision process in two main ways. First, in choosing the options that offer fewer risks and more opportunities for sustainability processes; and second, in the assessment of whether strategic integrated conditions for development are being adopted, supported by recommendations and guidelines to accompany the implementation of strategic decisions.

3. Evolution of SEA in Peru

SEA in Perú has been going through different stages. It was included in the legal framework in 2001 and fully incorporated with specific regulations in 2009 ([MINAM, 2009](#)). In 2016 a resolution ([MINAM, 2016](#)) by the Ministry of the Environment was issued to clarify the mandatory nature of SEA for certain types of policies, plans and programmes, its procedural steps, and the various stakeholders' responsibilities in the process. But, to date SEA-making in Peru is not even triggered by the Peruvian legal framework itself.

A review of the experience of SEA in Peru ([Biehl, J. et al., 2019](#)) found that the practice until 2015 was mainly informal and in most cases incomplete. The SEA of the Regional Development Plan of Loreto (*PDRC-Loreto*) was developed at the end of this period, however applying an EIA-based SEA methodology. This case works in this paper as a reference to our analysis (Case 0).

Triggered by the OECD recommendations, from 2016 to 2020 the Peruvian Ministry of Environment has developed three SEA pilot cases applying the strategic thinking methodology:

- Case 1. National Water and Sanitation Plan (2016).
- Case 2. Regional Development Plan of Pasco department (*PDRC-Pasco*) (2019-in progress)
- Case 3. Sustainable Urban Mobility Strategy within the Mass Transportation Master Plan of Lima & Callao (2019).

Before starting Case 2, the Ministry of Environment together with the authority of strategic planning (National Centre for Strategic Planning, *CEPLAN*) developed an integrated methodology of strategic thinking SEA with planning for territorial development (mainly economic development driven).

The main characteristics and findings of these cases are summarized in the next section.

4. SEA pilot cases description

4.1. Case 0. SEA of PDRC-Loreto (EIA based SEA)

Loreto's plan was formally conducted according to the national legal planning framework (*SINAPLAN* in Spanish), and its SEA was developed at the same time. It followed the legal procedure and was approved by the authority (Ministry of Environment).

Planning methodology and contents are established in *SINAPLAN* regulations and include forecasting analysis, and scenarios development and analysis, among others strategic contents. However, no strategic options or alternatives are explicitly considered in the methodology nor were considered in practice.

Planning and SEA processes and products were interrelated but worked independently, there was no real integration.

Although there is a strategic dimension in this Plan, the SEA did not take advantage of the strategic nature of the Plan. For example, the environment (that includes environmental and social variables) is considered from a traditional view as a supplier of natural resources and receptor of impacts, ignoring the added value created by the natural capital and the integration of sustainability values. SEA also did not contribute to scenarios building or options development, however SEA assessed the effects of the scenario selected in the Plan.

The main SEA contributions are 15 socio-environment management plans to control and mitigate negative effects, but unfortunately these plans are independent and not really integrated into the PDRC-Loreto's products, which puts its financing and coordinated implementation at risk.

4.2. Case 1. SEA of the National Water and Sanitation Plan (Strategic thinking SEA)

The first case using strategic thinking SEA in Perú is a sectoral plan focusing mainly on infrastructure, however with a strategic nature and contents. It contained a vision, strategic objectives and intended strategies.

SEA was not included in the Plan contract and terms of reference (ToR) initially, a fact that delayed the start of SEA. When initiated SEA found weaknesses in the strategic environmental contents: no alternatives or strategic options were included; the plan had a limited in-depth diagnosis and definition of institutional instruments and stakeholder's engagement were poor.

Despite limitations, institutional and governance frameworks improved with the SEA, for example, through cooperation between ministries of Environment and Sanitation. The main scope and outputs of the SEA methodology were completed: strategies were evaluated, workshop sessions organized with stakeholders contributed to the strategic focus of the SEA, to the identification of risks and opportunities of the Plan, and subsequently to the preparation of guidelines and a follow-up program.

4.3. Case 2. SEA of the PDRC-Pasco (Strategic thinking SEA)

Similarly to the PDRC-Loreto case, the planning process and contents of the second case, PDRC-Pasco, as its planning context, are difficult and complex. The process is not yet completed due to multiple institutional "crisis", as for example, changes in responsibilities between actors, update of planning methodological guidelines by CEPLAN, pandemic restrictions due to Covid-19, among others. Despite those limitations that have impeded the full completion of the Plan and SEA, the regional government is interested in resuming the Plan with the SEA, with the support of the Ministry of Environment.

SEA started simultaneously with the PDRC-Pasco and was supported by the previous methodological integration and institutional coordination (CEPLAN-MINAM) mentioned in section 3, which was key in the process. Besides, the work programme Plan-SEA was well coordinated between regional and national authorities and interactive teams were established and worked together in the first stage of Plan and SEA methodologies and process.

4.4. Case 3. SEA of the Sustainable Urban Mobility Strategy within the Mass Transportation Master Plan of Lima & Callao (Strategic thinking SEA)

The Mass Transportation Master Plan (MTMP) of Lima & Callao (horizon 2050) is an operational plan of transportation services and infrastructure, a sectoral plan but with no strategic dimension. As a big conurbation, Lima and Callao with more than 10 million inhabitants and 95 km along the Pacific coast, determine a highly complex planning context with multiple actors and sectors involved.

The plan included in its ToR an EIA-based SEA, mainly to address the physical impacts of the transport infrastructure on the urban environment but had no intention to consider its strategic dimension. It was then decided to adopt Strategic thinking SEA to enable a previous strategic stage to the Master Plan; a Sustainable Urban Mobility Strategy (SUMS) was prepared to be formulated with SEA, supporting strategic development options, considering the support and contribution of key stakeholders.

In this case, SEA of the SUMS started before the Master Plan SEA thanks to an effective institutional coordination (Autonomous Transport Authority, Ministry of Transport and Ministry of Environment). In the same line, there was good interaction facilitated by the strategic focus enabled by the strategic thinking SEA and by a good level of actors' engagement.

SEA enabled amplifying the environmental and sustainability focus, including Sustainable Development Goals. Also, in this case, scope and main outputs of the strategic thinking SEA methodology were completed: strategic options were generated, discussed and assessed in terms of risks and opportunities, with guidelines for MTMP and other planning instruments (i.e. future update of regional and districts urban plans) issued.

5. Main benefits of Strategic thinking SEA application in Perú

Although case 2 is not yet completed, there are outputs that provide clear learnings, and benefits, from the application of the strategic thinking SEA methodology so far in Perú.

First most relevant benefit was the improvement of the strategic dimension and contents at least in cases 1 and 3. A second relevant benefit -observed in the three cases- is the role SEA played in amplifying the scope of the environmental issues from traditional biophysical variables to sustainability issues, with a more broad but integrated conception, thus reinforcing the role of SEA as an instrument for sustainable development. Related with this, the methodology was very useful to prioritize and focus the scope of the assessment in all three cases, which is another important benefit. The fact that strategic thinking SEA sets out with a focus exercise, based on a short but strategic diagnosis to prioritize the relevant, integrated, themes, that should require the attention of the plan and SEA, helps to make outputs more relevant for decision-making. An additional benefit relates to the identification of opportunities and risks of strategies or strategic options, when available, or at least of intended planning proposals. And consequently, based on the opportunities and risks assessment, the guidelines issued by SEA as a contribution for planning to control risks and take advantage of opportunities in the future implementation stages.

Finally, a major benefit that should be highlighted is that SEA played a relevant role in improving coordination between the several formal organizations involved in the planning & SEA processes of the three cases. This is a key aspect considering the institutional framework in Peru where entities usually work in "silos", protected by sectoral responsibilities and regulations which difficult actual coordination and environmental/sustainability integration. In addition, the participatory dimension in the three cases was further stimulated by SEA, since relevant actors, representing different social groups and sectors, were engaged in dialogues for strategic focus and subsequent stages of options assessment.

All the above benefits represent key learnings with the experience of applying strategic thinking SEA in Perú, showing that the whole planning process can be improved, with potential outcomes for the planning system itself. That however will need time to be evident, with a systematic implementation of strategic thinking SEA in Perú, in order to be demonstrated. A major learning outcome is that strategic thinking SEA should be seen more as a governance exercise than as a technical sequence of studies as delivered by conventional SEA.

6. Conclusions

We analysed the recent (2016-2019) experiences of SEA in Perú where three cases were developed. In these experiences a strategic thinking SEA methodology (ST4S) with the purpose of responding to the Peruvian

Ministry of Environment desire to strengthening SEA practice and improve limited outcomes of past experiences. As indicated in section 5, clear benefits from the use of the ST4S methodology were found in the three cases despite some limitations with the national, regional and sectoral planning systems, as well as limitations in the articulation between the planning and SEA processes. This articulation requires mid to long-term learning, as an on-going process that requires systematic and continuous application.

Additionally, there are some findings that could indicate the likely development of new cases where strategic thinking SEA methodology might be applied in the future. For example, one positive common finding of the three experiences was the attitude of the participants, who were open-minded to implement strategic thinking SEA recognized as an instrument for sustainable development. On the other hand, because of these experiences, policy and plan proponents -for example, of the water, transportation and regional development sectors- are interested in working together with the Ministry of Environment to carry out SEA in support of their planning processes.

Of course, some relevant challenges remain. Despite the earlier experience and the raising of openness to such an innovative form of SEA, there is still a generalized perception of SEA as a big EIA, very much justified by the still existing regulation that promotes the practice of EIA-based SEA. Resistance to change is also a human reaction to most innovations. Altogether these conditions create resistance to using a more strategic thinking SEA.

Finally, despite having a formal and very well structured planning system, with a national level dedicated authority that issues regulations, guidance as well as training, the fact is that policy and planning practice in Peru are still limited by weak institutionalization. Consequently, institutionalizing SEA becomes also of major importance, aligned with policy and planning, to fully establish a working SEA system in Peru.

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