

Implementing the MCM in social LCA

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1. Context and scope

The culture of assessment is growing within both public and private organisations. There are several reasons driving decision makers to determine, ex-ante or ex-post, the effects and impacts of the projects they are leading. The notion of performance is gradually being replaced by the notions of short and medium-term effects, and long-term impacts. LCA paved the way, by providing a standardised comprehensive method for assessing the environmental consequences of projects, programmes and public & private policies, when they affect product or service industries. The work conducted in this area for the past decade is now changing the perception of the decision makers, through mandatory consideration of the following points: designing the product or service for its entire life cycle, taking into account the stakeholders in developing a strategy, avoiding impact transfers between links in the chain, clearly explaining the objectives pursued and the scope under study...

This need for expanded assessment has extended to all dimensions of sustainable development. There are a wide variety of reasons for this. In no particular order, we can mention: the quest for increased economic efficiency, increasing awareness of the social effects of human activities worldwide, a necessary reassurance to customers and stakeholders as to their consumption habits and production conditions... This quest for stringency and transparency can be observed in the private sector, as well as the public and non-governmental sectors.

True, there are still substantial needs for communication, as a matter of priority, and the threat of "Green" or "Social washing" are still looms. Despite this temptation, we have to recognise that the marker for the requirements, and therefore the objectives, is gradually moving toward the need to assess the reality of the impacts caused by a project. So naturally we are moving from a performance culture to an impact culture. No longer is it the euro spent which counts, but how it translates into "impact of corporate action (for each category of player and for each category of capital) on the transformation of individual endowments into additional operating capacities" (Garrabé et al., 2013). The author at this point recalls two concepts which will underpin the methodology that we implement in the field to assess the impact of production

of a marginal product or service on society and individuals. Feschet and Garrabé suggested giving Social LCA a theoretical framework (Feschet et al., 2013) combining a multiple capital model (e.g. Stiglitz et al., 2009), and capabilities (Sen, 1993). It is within this theoretical framework that the capacities Social LCA is proposed and implemented.

2. Main text

The issue of capacities Social LCA, as for any other methodology, is to define and put together indicators able to measure the impact of an organisation's action. Garrabé suggests adopting as the various classes of capital: human, technical, financial, social and institutional capital, to which we might add natural capital. Along with other authors (Rodrik, 2000), Garrabé believes that certain capital sub-classes must be assessed. In this case we must identify the main categories of effects that each of the sub-classes might generate, all things otherwise being equal.

Contextualisation

Contextualising means having to go beyond ordinary technical, economic and financial analysis, to take into account the geographic, historical and social factors specific to the area under study. The role of the stakeholders is central, since they are the custodians of these specificities. Through consultation of these essential players of economic and social development with the project sponsor, their “objects to protect” or “objects to develop” can be jointly defined. Consideration and comparison of the values systems of each stakeholder makes it possible to define the project's reference value system. We might think of health, which is often a value common to all groups of players. Education is also part of the common foundation. Many other values may similarly be taken into account: equality, security, justice, certain cultures, etc. Here we are putting our finger on the problem of governance of this sort of assessment. Taking this into consideration from the initial stages means “linking the implementation of sustainable development to the conditions of governance under which it operates” (Rey-Valette, 2010). The author goes even further in demonstrating that there is no appropriation of sustainable development without governance involving the stakeholders at all levels.

The tool does not make the assessment

The choice of tool must come in the second stage of the assessment approach. The trend is actually to use a tool in which the assessment teams are proficient, and matching the field and the assessment issue. This malpractice automatically leads to questionable results. While Social LCA is a general concept, it is completely open as to the assessment tools to employ. We might use conventional tools such as calculating direct and indirect added value, or much more elaborate modelling and forecasting

tools, such as the cause-effect relations based on complex econometric models. The example of the Preston pathway, which links economic activity to the life expectancy of a population, is a very good example (Feschet et al., 2012).

Governance or role of the sponsor

The study sponsor is fully involved in the process of choosing the effects to study, but does not monopolise this role. In the latter scenario, it would be placed in the middle of the circle of industry stakeholders (desire to control the industry), or outside it (desire to relieve itself of responsibility), whereas it should be on the circle, along with all the stakeholders (figure 1).

There are various types of studies (ad hoc, second party, third party, etc.). Two specific cases lend themselves to conducting a Social LCA:

- several linked parties (by a contract, by membership of a union or professional body, by geographic production zone, by a common stake, etc.) decide to conduct an assessment on the effects of an organisational or technical change, on a new project, etc.
- the sponsor is one of the industry stakeholders (dominant firm, regulating body, rival to the dominant firm, etc.), but accepts the principle that it is just one of the factors to take into account, and that the success of the study will be dependent on the other parties taking part, in a democratic process.

In every case, the conditions for success are that it is eminently open and collaborative. In the best case scenario, the adopted solution will be all the more accepted by all of the players since they will have taken part in its assessment.

Scope

Experience acquired in the field shows that it is illusory to aim to conduct an exhaustive study such as a Capacities Social LCA throughout the product life cycle. In the vast majority of cases, the resources (financial and time) allocated to the study are by their nature limited. Even when the resources are available, we saw in the paragraph above that there is no any relevant social assessment unless it relates to the wellbeing of the persons concerned (Macombe, 2013).

So it is the binomial “target group” x “impact category” that will be needed to reduce and determine the scope of the study (geographic, institutional, economic, social, etc.). There also needs to be an overview of the industry. So the industry approach (stakeholders, flow analysis, financial relationships, operational relationships, etc.) is essential in order to define the social life cycle, which is “the system of interacting organisations, whose social behaviour depends on the existence of the product under study, and causes substantial social effects.” (Macombe, 2013).

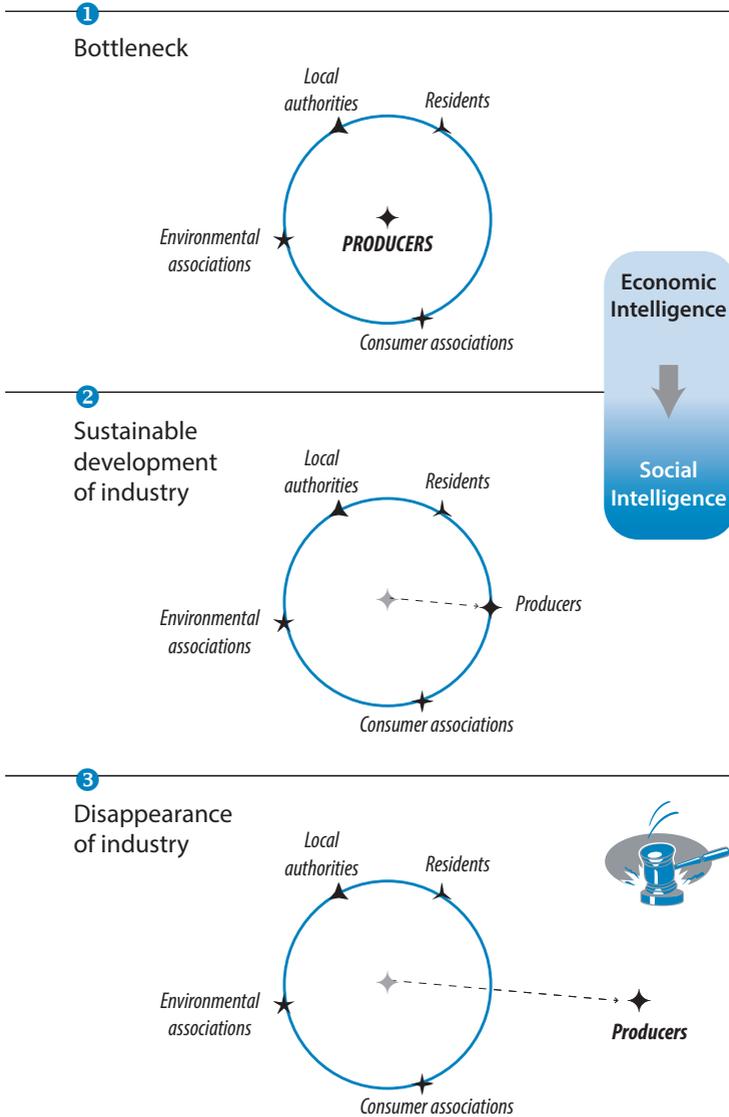


Figure 1: Producer's role in the strategic domain, and effect on industry development (sources: C. Gillet, D. Loeillet, M. Garrabé)

The example of the export banana industry is interesting from this viewpoint. The product has a long and complex life cycle. It develops over 10,000 km (between production and consumption), involves a host of processes (production, transport, packing, ripening, etc.), consumes large amounts of inputs and very heavily affects its natural and social environment. So it is difficult to achieve a social assessment for the complete life cycle of this product. It is by industry analysis, with the support of the stakeholders, that we have been able to identify the dominant forms of organisation (those which can change things), and the weakest stakeholders (those for which something needs to change). For the banana, this identification has been made thanks to a group comprising a highly representative set of industry players, the World Banana Forum. The conventional industry analysis work (especially breakdown of value), and the discussions within the Forum, have made it possible to identify the farm workers, small producers and their families as at-risk groups, due to their large number in the industry, their insecurity in terms of revenue (and low added value capture), working and living conditions.

Assessment issue

The subject of study of a Social LCA may be defined only once the initial problem has been contextualised and discussed with the stakeholders. These initial exchanges make it possible to very quickly identify the constraints, stakes and complexity associated with the operation of the industry. This work often leads to the study being specified and focused on a more realistic target. Too often, the issue is defined in general terms without initial consultation. These situations lead to bottlenecks or difficulties accessing information, which greatly limit the usefulness and scope of the results.

Functional unit

In principle, setting out to reveal a link between a product or a service and its socio-economic effects and impacts is a tall order. However this requirement is a specificity of the life cycle analysis. This point is often approached based on the product sold to the end consumer. This apparently logical approach is not always relevant, since in certain cases, the functional unit quite simply does not exist for all of the industry players. Example: 1 kg of bananas or 1 kg of meat (pork or beef): in the case of the banana, practically all the industry players see the finished product and base their strategy on the finished product; in the case of the meat, only the customer and the industry downstream see the finished product; all the other players (upstream, production) work on distinct units of measurement (carcass, adult animal, birth, juvenile animal). In the case of the banana, there is direct continuity between the production function and the functional unit. In the case of meat, there is no continuity. This discontinuity poses real allocation problems. The hypotheses used to factor continuity of the unit into the life cycle introduce more or less serious biases into the results.

These remarks and these limits are especially important if there are by-products associated with the functional unit.

Scoring

Use of a scoring method such as the Score[®] matrix (Gillet, 2014) developed by the Centre for Project Studies (CEP, Montpellier) entails open and transparent interaction with all the stakeholders involved. Assigning a value to the indicators via the method linking MCM and Capacities requires active participation of the stakeholders in the choice and weighting of the capitals and sub-capitals adopted for impact measurement. By virtue of its structure, the Score matrix compares and articulates a technical assessment (via MCM-Capacities) in a system of values (via the stakeholders involved). The results for the various projects (scores) round off the assessment process, supporting the stakeholders to the end: the decision.

Information

The lessons drawn from previous studies show us that there is always a big challenge around information access. It is one of the recurrent limits of all social assessments. Access may be impeded by certain stakeholders (who want to take advantage of the information dissymmetry) or may be non-existent (case of under-studied industries, or in countries with a deficient statistics gathering system). In every case, the issue of heterogeneity of information quality, and therefore validity, arises (Garrabé, 2013).

In project assessment mode

Finally, it is important to recall that any assessment is contingent on a specific context (economic, social and environmental) and a specific time frame. So it is extremely tricky to compare two projects not developing in the same context. Going back to our example of the banana, comparing the situation of workers on big plantations in Costa Rica to the situation of small producers in the Dominican Republic makes no sense, so different are the parameters and initial context. However, we might compare the “social difference” of a production extension project in Costa Rica with that of an extension project planned in the Dominican Republic. In this case we would retain the relativity of the effects associated with a definite context, rather than venturing into comparison, by absolute value, of the social footprint of two contextually distant organisations.

Conclusions

By virtue its nature, the assessment of social and non-biophysical processes, the Social LCA is highly complex, since it seeks to assess impacts via a wide variety of methods. To this end it implements a large number of methods, from the most conventional to the most pioneering. While the conceptual and methodological framework applies to

the whole life cycle of a product, in reality, it is very difficult to successfully complete a multi-criteria assessment over the entire process. So we will use methods to reduce both the groups, but also the effects to be studied. Finally, we will constantly guard against de-contextualisation of the results, which would make us assess hypothetical effects (values with no specific reference system), while all the effects are linked to a definite territory, organisation and time frame.

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