Conceptualising social impacts

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Abstract

The conceptual framework based on environmental function evaluation of Slootweg et al. [Impact Assess. Proj. Appraisal 19 (2001) 19–28.] is used as the basis for conceptualising social impacts. Existing lists of social impact variables, such as those of the Interorganizational Committee for Guidelines and Principles for Social Impact Assessment, are examined and found to be inadequate and contradictory. A new listing of some 80-odd indicative social impacts is developed reflecting a change from project-based thinking to inclusion of the impacts of policies and programs, from thinking only about negative impacts to including positive benefits, and from thinking about unintended consequences to including intended consequences. The importance of differentiating between social impacts and social change processes is highlighted. Many of the variables typically measured in social impact assessment (SIA) studies are not in themselves impacts, but rather represent the measurable outcomes of social change processes, which may or may not cause impacts depending on the situation. Caution is expressed in the use of the list of impacts as a checklist. © 2002 Elsevier Science Inc. All rights reserved.

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1. Introduction

Ideally, the issues to be considered in a social impact assessment (SIA) study should derive from the scoping exercise conducted as part of the study. The

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social impacts likely to be significant will vary from place to place, from project to project, and the weighting assigned to each social impact will vary from community to community and between different groups within a given community. Since the factors to be considered in a SIA study should be determined in conjunction with input from the community, it might at first be regarded that there is little utility in having a well-developed list of social impacts to consider.

There are many arguments against the development of a checklist. At worst, a checklist would mean that charlatan consultants — those with little training in the social sciences (see Burdge and Vanclay, 1995) — may use the checklist instead of undertaking a proper scoping process. They may just use so-called ‘expert judgements’ to specify likely impacts rather than undertaking field work or involving the public in determining locally important issues. In the process of specifying impacts, consultants using a checklist approach may not properly think through the complex causal mechanisms that produce social impacts, especially the higher-order impacts or flow-on effects (Slootweg et al., 2001). Expert opinions often vary markedly from local community opinion about likely social impacts and the desirability of alternatives. Many SIA studies have substantially underestimated the social impacts that have been experienced by affected communities.

On the other hand, a comprehensive list of impacts may increase awareness of the full range of social impacts, and may lead to improved assessments as a result. There is also considerable demand for a generic list of social impacts. Cursory analysis of existing lists of social impacts indicates a high degree of inconsistency between such lists and internal inconsistency within many of the lists.

This paper reviews the literature on social impact variables and concepts, analyses consistencies and contradictions in the various lists of variables, and presents a new listing of social impacts, which was partly developed using the function evaluation framework for integrating social and environmental impact assessment as elaborated by Slootweg et al. (2001). While there has been an attempt at completeness, the social impacts listed are quite likely to exhibit various prejudices and biases. Other people — particularly those from other cultures and/or economic settings, economists and/or institutional development specialists — may well classify impacts differently.

2. Existing social impact variable lists

Many publications provide a generic classification of types of social issues that should be considered in SIA. Few publications include lists of specific social impacts. In these publications, social impacts can refer to quantifiable variables such as numbers of immigrants (newcomers), but can also refer to qualitative indicators such as cultural impacts involving changes to people’s
norms, values, beliefs, and perceptions about the society in which they live. Most social impact specialists stress that it is impossible to detail all dimensions of social impact—social change has a way of creating other changes. Further, most of the changes are seen as situation specific and are therefore dependent on the social, cultural, political, economic, and historic context of the community in question, as well as the characteristics of the proposed project and of any mitigation measures implemented.

The ambiguity associated with impacts, the lack of operational definitions for many constructs, as well as an asocial mentality (Burdge and Vanclay, 1995), has led to a focus on investigation on measurable impacts (e.g. economic and demographic) and/or politically convenient indicators such as population change, job creation, or use of services (Gramling and Freudenburg, 1992). At the other extreme, Cernea (1994) complains that there have been some in-depth social analyses that have a tendency to become lengthy social overviews without any focus on the likely future social impacts. Mining companies have tended to favour these ‘social monitoring’ projects (see, for example, Banks, 1999a,b, 2000).

Attempts have been made by various social scientists to develop classifications of types of social impacts, but few have developed lists of specific social impacts, and fewer still have provided operational definitions of their variables. Amongst the classifications are the following.

Audrey Armour (1990):

- people’s way of life — how they live, work, play, and interact with one another on a day-to-day basis;
- their culture — shared beliefs, customs, and values;
- their community — its cohesion, stability, character, services, and facilities.

Vanclay (1999), expanding Audrey Armour’s list, has identified the following as important:

- people’s way of life — that is, how they live, work, play, and interact with one another on a day-to-day basis;
- their culture — that is, their shared beliefs, customs, values, and language or dialect;
- their community — its cohesion, stability, character, services, and facilities;
- their political systems — the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose;
- their environment — the quality of the air and water that people use; the availability and quality of the food that they eat; the level of hazard or risk, dust, and noise in which they are exposed to; the adequacy of sanitation, their physical safety, and their access to and control over resources;
their health and well-being — where ‘health’ is understood in a manner similar to the World Health Organisation definition: “a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity”;

their personal and property rights — particularly whether people are economically affected, or experience personal disadvantage, which may include a violation of their civil liberties; and

their fears and aspirations — their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

Juslén (1995) considered that a universal list of social impacts that would suit every case was not possible but argued that a checklist would be useful, especially in scoping. He identified several general impact categories:

1. ‘standard’ social impacts concerning noise level, pollution, and so on;
2. psychosocial impacts (such as community cohesion, disruption of social networks);
3. anticipatory fear;
4. impacts of carrying out the assessment;
5. impacts on state and private services; and
6. impacts on mobility (such as transportation, safety, obstacles).

In more general typologies, Taylor et al. (1995) identified lifestyles, attitudes, beliefs and values, and social organisation. Branch et al. (1984) highlighted community resources, community social organisation, and indicators of individual and community well-being.

Gramling and Freudenburg (1992) distinguish between six systems of the human environment:

1. Biophysical and health systems;
2. Cultural systems;
3. Social systems;
4. Political/legal systems;
5. Economic systems; and
6. Psychological systems.

The Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994) included a list of social impact variables. These variables point to measurable change in human population, communities, and social relationships resulting from a development project or policy change. Rabel Burdge, a member of the Interorganizational Committee, produced a similar list (see Box 1), which has been subsequently modified in the 1999 revised version of his manual.
Box 1: Comparison of social impact variable lists of the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994) and Burdge (1994)

<table>
<thead>
<tr>
<th>Interorganizational Committee</th>
<th>Burdge's List of 26</th>
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</thead>
<tbody>
<tr>
<td>Population characteristics</td>
<td>Population characterisitics (demographic effects)</td>
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<tr>
<td>1. Present population and expected change</td>
<td>1. Population change</td>
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<tr>
<td>2. Ethnic and racial diversity/distribution</td>
<td>2. Dissimilarity in age, gender, racial or ethnic composition (ethnic and racial distribution)</td>
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<td>3. Relocated populations</td>
<td>3. Relocated populations</td>
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<td>4. Influx or outflow of temporary workers</td>
<td>4. Influx or outflow of temporary workers</td>
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<td>5. Seasonal residents</td>
<td>5. Seasonal (leisure) residents</td>
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<tr>
<td>Community and institutional structures</td>
<td>Community and institutional structures (public involvement)</td>
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<tr>
<td>6. Voluntary associations</td>
<td>6. Formation of attitudes towards the project (voluntary associations)</td>
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<td>7. Interest group activity</td>
<td>7. Interest group activity</td>
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<td>8. Size and structure of local government</td>
<td>8. Alteration in size and structure of local government</td>
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<tr>
<td>10. Employment/income characteristics</td>
<td>10. Industrial/commercial diversity</td>
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<tr>
<td>11. Employment equity of minority groups</td>
<td>11. Enhanced economic inequities</td>
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<tr>
<td>12. Local/regional/national linkages</td>
<td>12. Employment equity of minority groups</td>
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<tr>
<td>14. Presence of planning and zoning activity</td>
<td>Conflicts between local residents and newcomers</td>
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<td>Political and social resources</td>
<td>14. Presence of an outside agency</td>
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<td>15. Distribution of power and authority</td>
<td>15. Introduction of new social classes</td>
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<td>16. Identification of stakeholders</td>
<td>16. Change in the commercial/industrial focus of the community</td>
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<td>Individual and family changes (cultural effects)</td>
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<td>Individual and family changes</td>
<td>18. Disruption in daily living and movement patterns</td>
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<td>20. Displacement/relocation concerns (perceptions)</td>
<td>20. Alteration in family structure</td>
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<td>21. Trust in political and social institutions</td>
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<td>22. Residential stability</td>
<td>22. Perceptions about public health and safety</td>
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<td>23. Density of acquaintance</td>
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<td>Community resources (infrastructure needs)</td>
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<td>25. Family and friendship networks</td>
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<td>26. Concerns about social well-being</td>
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<td>Community resources</td>
<td>26. Effects on known cultural, historical and archaeological resources</td>
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<td>27. Change in community infrastructure</td>
<td>27. Effects on cultural, historical, and archaeological resources</td>
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<td>29. Land use patterns</td>
<td>29. Effects on cultural, historical, and archaeological resources</td>
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<td>30. Effects on cultural, historical, and archaeological resources</td>
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3. Analysis of the impact lists

The first observation in the analysis of lists of social impacts is that there is a strong reluctance by SIA researchers to provide variable lists, often because of a view that everything is always context dependent and therefore unique. The second observation is that where lists are provided, there are substantial differ-
ences both in terms of the range of impacts that are included and in the way that impacts are categorised or grouped. Many potential social impacts are entirely missing from the lists, there is a focus only on negative impacts, and impacts are described in ethnocentric terms. It is clear that there are wide discrepancies about what constitutes social impacts.

Although the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994) had a policy that impact assessments should focus on the things that count and not the things that can be counted, there does appear to be an emphasis in the Interorganizational Committee’s list on empirical measures. A particular issue is that many of the variables in the Interorganizational Committee’s list (and in Burdge’s list) are not in themselves necessarily social impacts. Taking the first grouping of variables “population characteristics” from the Interorganizational Committee’s list (see Box 1), for example, none of the five ‘variables’ listed constitute an ‘impact’ where an impact is an actual experience of an individual or community. Traditionally measured social impact variables like increase in population, increase in ethnic or racial diversity, relocation, presence of temporary workers, and/or seasonal residents are not in themselves impacts. Under certain circumstances, they will result in social impacts such as loss of community cohesion, fear and uncertainty amongst residents, fluctuating real estate (property) values, shortage of housing, etc., but if properly managed, these demographic changes might not create impacts. Whether impacts are caused will depend on the characteristics and history of the host community and the extent of mitigation measures that are implemented.

In the second grouping of impact variables in the Interorganizational Committee’s list, i.e. Community and Institutional Structures, many of the listed indicators also are not in themselves social impacts. Rather, they refer to intervening variables that provide an indication of the characteristics of a community and whether the community is likely to experience impacts. The presence of voluntary associations, the size and structure of local government, and historical experience with change are obvious examples of this point. Local government and other formal organisations, as well as informal organisations such as community groups may experience impacts, but the actual presence of these organisations is not the impact.

It is obvious therefore that the list provided by the Interorganizational Committee is not a list of social impacts, but, rather, it is a list of indicators that should be considered in a study to provide information that could be used to determine social impacts that might exist in a particular community.

More distressing is the realisation that many social impacts are entirely missing from the lists. First and foremost are occupational health and safety issues. Many construction activities create danger to the community, as well as to workers (who may belong to the local community). Many projects alter patterns of daily life that expose people to risk. Death and injury are social impacts that can be the direct result of a project, for example, especially if a project increases the volume of traffic in a neighborhood. Many projects increase exposure of
residents and/or workers to diseases, especially vectored diseases (e.g. malaria, bilharzias) because of changed ecological conditions. Social changes, especially relating to work practices (e.g. men away from home for work) may result in increased sexually transmitted diseases (such as HIV/AIDS). Tourism and its associated prostitution can also lead to increased spread of communicable diseases (Truong, 1990).

There is no mention of human rights. Violation of human rights is a social impact. Violation of human rights can occur when governments use force to allow a project to occur, or when public comment in opposition of the project is suppressed. Violation of the right of free speech occurs in developing countries, as well as developed countries. For example, in the USA, project proponents have threatened community activists with legal action over public statements they may make about a project. The use of so-called SLAPPs (strategic lawsuits against public participation) has the effect of silencing opposition (Beder, 1997; Canon and Pring, 1988).

While the Interorganizational Committee does include perceptions of risk, health, and safety as impacts, it fails to appreciate that actual risks are impacts, too. In restricting themselves to a small number of impacts, the Interorganizational Committee has not adequately represented the full range of social impacts, and they have trivialised some impacts. Clearly, existing lists of social impacts are inadequate, and there is need for a more comprehensive list. It is also clear that there is a strong Western orientation to the lists that have been developed. They demonstrate concern about individual property rights. Broader social objectives and goals of development are entirely missing from such lists. Despite the rhetoric of many SIA writers, it is clear that the lists of social impacts produced and the variables considered in most SIA studies relate only to the negative social impacts of projects. Positive impacts, the impacts of policies and programs, and the benefits, goals, or objectives of planned interventions are not seriously considered, despite rhetorical statements that they should be.

### 4. Definitions of SIA and associated conceptions of social impact

The inadequacy of many SIA studies derives in part from the lack of a regulatory agency definition of SIA and the lack of appropriate peer review of studies to ensure professional best practice. As a result, many studies have not been of a satisfactory standard and many have failed to consider the full range of social impacts that might be experienced. Consensus about a definition of SIA and an agreement about the variables that at a minimum need to be considered would enhance the quality of studies. It was this thinking that led to the establishment of the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment in the USA and the production of its report in 1994. Anchored in the context of the National Environmental Policy Act (NEPA) of 1969, the Interorganizational Committee’s report was not
written in a general format suitable for adoption internationally. Burdge and Vanclay (1995, p. 32) modified the Interorganizational Committee’s definition to be more generally applicable.

Social impact assessment can be defined as the process of assessing or estimating, in advance, the social consequences that are likely to follow from specific policy actions or project development, particularly in the context of appropriate national, state or provincial environmental policy legislation. Social impacts includes all social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organise to meet their needs, and generally cope as members of society. Cultural impacts involves changes to the norms, values, and beliefs of individuals that guide and rationalise their cognition of themselves and their society.

However, this is not useful when considering projects in developing countries, when SIA needs to be considered more as “a framework for incorporating participation and social analysis into the design and delivery of development projects” (World Bank, 1995) and/or as “a process for research, planning and management of change arising from policies and projects” (Taylor et al., 1995, p. 1). Thus, SIA needs to be process oriented to ensure that social issues are included in project design, planning, and implementation, as well as ensuring that development is acceptable, equitable, and sustainable (Branch and Ross, 1997). The improvement of social well-being, with a particular focus on poverty reduction and an emphasis on democratisation, should be explicitly recognised as an objective of development projects and plans, and as such, should be a performance indicator considered in any form of impact assessment. Vanclay (2002, p. 388) expanding from Goodland (2000, p. 12) writes:

SIA is more than a technique or step, rather, it is a philosophy about development and democracy. As such, ideally it considers pathologies of development (i.e. harmful impacts), goals of development (such as poverty alleviation), and processes of development (e.g. participation, capacity building).

With input from participants at conferences of the International Association for Impact Assessment, Vanclay (2002, p. 388), defines SIA in the following manner:

Social impact assessment is the process of analysing (predicting, evaluating and reflecting) and managing the intended and unintended consequences on the human environment of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions so as to bring about a more sustainable and equitable biophysical and human environment.

SIA, therefore, is an umbrella or overarching framework that encompasses all human impacts including aesthetic (landscape analysis), archaeological and heritage, community, cultural, demographic, development, economic and fiscal, gender, health, indigenous rights, infrastructure, institutional, political (human
rights, governance, democratisation etc.), poverty-related, psychological, resource issues (access and ownership of resources), the impacts of tourism and other impacts on societies. SIA is not limited to a narrow or restrictive understanding of the concept ‘social.’

5. A framework for conceptualising social impacts

With a broad definition of social impact, it is difficult to delineate the specific social impacts that may occur in any situation. The integrated framework of Slootweg et al. (2001) identifies the pathways by which environmental and social impacts derive from specific projects (see Fig. 1) and assists in thinking about social impacts. Derived from the environmental functions analysis of R.S. de Groot (1992a) and W.T. de Groot (1992b) (see Slootweg et al., 2001), the framework separates a physical change to the environment from a physical impact, that is, a change in the functions provided by the environment (i.e. the environmental products and services). For example, a fluctuating watertable (a physical change) may or may not cause an environmental impact (change to the environmental services). The distinction between a change process and impact in physical environment encouraged a thinking about social impacts in much the same way. Many social changes are not in themselves ‘impacts.’ If ‘social impact’ refers to the impacts actually experienced by humans (at individual and higher aggregation levels) in either a corporeal (physical) or cognitive (perceptual) sense, then many impact variables commonly measured in SIA studies — for example, population growth, presence of construction workers, etc. — are not impacts, but change processes that lead to impacts.

Fig. 1. Integrated framework for environmental and social impact assessment.
An increase in population, or the presence of strangers, are not the ‘felt’ impacts. Instead, the impacts that will likely result from these change processes are changed perceptions about the nature of the community (communityness, community cohesion), changed perceptions about personal attachment to the community, and possibly annoyance and upsetness as a result of the project. The ways in which the social change processes are perceived, given meaning, or valued depends on the social context in which various social groups act. Some sectors or groups in society are able to adapt quickly and make use of the opportunities that arise from the new situation. Others are less able to adapt (e.g. various vulnerable groups) and will bear most of the negative consequences of change.

To complete the interpretation of the figure, some explanation of the iterations and feedback mechanisms is required. Social change processes that result directly from the intervention, the so-called first-order changes, can lead to (several) other social change processes, the second- and higher-order change processes. For example, resettlement can lead to processes of rural-to-urban migration and changes in food production. In addition, the social experience of change (that is, the human impacts) can also provoke people to undertake other behaviour that leads to further social change processes. For example, the negative human impacts (experiences) associated with unemployment can activate the social change process of rural-to-urban migration in search of work. Social change processes can also provoke biophysical changes. Economic developments that increase the number of tourists in a particular area can have serious influence on land use and water quality, which, in their turn, can have indirect human impacts through a reduction in agricultural production and subsequently on income level for small holder farmers (Slootweg et al., 2001).

In the SIA literature, no distinction is made between the social change processes and the social impacts that are experienced. Social change processes are set in motion by project activities or policies. They take place independent of the local social context. Resettlement, for example, is a social change process, set in motion by, for example, the activity of land clearance (for a road or an agricultural project), or by inundation of an area by dam construction. Social change processes can lead to several other, second-order, social change processes. Resettlement can lead to processes such as rural-to-urban migration and changes in food production. Depending on the characteristics of the local social setting and mitigation processes that are put in place, social change processes can lead to social impacts.

Direct social impacts result from social change processes that result from a planned intervention. They may be the intention of specially designed activities to influence the social setting (intended impacts), or may unintentionally result from these activities. Indirect social impacts are a result of changes in the biophysical environment. Biophysical changes can affect the functions the environment provides for people. For example, if an activity causes land degradation, one of the biophysical impacts can be that the productive capacity of the land will decrease. The resulting reduction of income from farming activities is an indirect social impact. Biophysical changes can also have effects
on disease organisms or disease vectors that lead to health impacts: An example is the introduction of irrigated agriculture. This leads to social change processes such as the creation of jobs and an increase in food supply. A direct social impact resulting from these social change processes is the raising of social well-being. However, the same activity leads to biophysical changes such as the creation of breeding sites for mosquitoes and snails, resulting in biophysical impacts such as increased transmission of malaria and schistosomiasis and, consequently, in the reduction of health (indirect social impact).

The framework presented by Slootweg et al. (2001) presents a useful way of thinking about the integration of social and environmental impacts and for conceptualising the full range of social impacts that are likely to occur from a given intervention. By following impact pathways, or causal chains, and, specifically, by thinking about the iterations that are likely to be caused, the full range of impacts can be identified. This makes the model a useful scoping mechanism and an heuristic aid.

6. Social change processes

It is impossible to identify all social change processes that could occur in any given project or amongst a range of projects and to particularly identify all the background social change processes that are taking place in society. While there are many social change processes, part of the problem of identification is also a lack of clarity about what exactly constitutes a social change process, and the level of detail at which these processes should be specified. Below are some examples of the social change processes that are important in SIA. This list is not complete, it is simply an indicative list of examples of social change processes. It is likely, however, that the categorisation of social change processes into a number of groupings of social change processes is appropriate and likely to be robust across a range of situations. The social change processes are likely to comprise the following groupings:

(A) Demographic processes (changes in the number and composition of people);
(B) Economic processes (relating to the way in which people make a living and economic activity in the society);
(C) Geographical processes (changes in land use patterns);
(D) Institutional and legal processes (relating to the efficiency and effectiveness of institutional structures including government and nongovernment organisations);
(E) Emancipatory and empowerment processes (increasing influence in decision making processes);
(F) Sociocultural processes (affecting the culture of a society); and
(G) Other processes.
6.1. Demographic processes

Demographic processes are those that relate to the movement and/or composition of people in the region(s) affected by the project. They include the following.

- **In-migration.** Rapid population growth can place strain on a local area in relation to a wide range of economic, social, and environmental issues. ‘Boom-towns’—towns established because of, or which become affected by, rapid development—have many unique issues that need to be addressed. In-migration is not an impact in itself, but potentially leads to impacts such as inadequacy of services.

- **Out-migration.** Projects can also lead to a decline in population size where people move out because the area affected by a project becomes less desirable as a place to live, or because a project some distance always lures people in search of work. Decline in population (especially if associated with a changing demographic composition) can have profound effects on the viability and vitality of a place.

- **Presence of newcomers.** The social impacts of in-migration are exacerbated when the newcomers (new settlers) are different from, or perceived as being different from, ‘old timers.’ The physical presence of newcomers is not an impact because actual impacts depend on the impact history of the community and the nature of any mitigation mechanisms, as well as characteristics of the community and the newcomers themselves.

- **Presence of (temporary) construction workers.** Impacts are often different when the newcomers are construction workers or other project personnel who are resident in the project area on a short-term (or commuting/fly in, fly out) basis. The types and severity of impacts caused depends on the number, composition, and (dis)similarity of these ‘project people,’ as well as logistical arrangements and mitigation processes. As with newcomers, their presence will have impacts on infrastructure needs such as housing and health facilities, roads and shops—however, because of the temporary nature of their presence, many construction workers do not develop an attachment to place or affiliation with the local community, and construction camps may demand a range of services such as prostitution and alcohol outlets (and sometimes other drugs) that cause concerns for existing residents. The nature of construction and life away from home often leads to a ‘work hard, play hard’ mentality and can lead to lower levels of social control (and self control) than those usually expected in an adequately functioning community. There are also problems associated with the boomtown nature of construction camps—often, when they leave, the local community is left with an overcapacity.

- **Presence of seasonal residents.** Some projects, especially tourism-related projects, may lead to the presence of seasonal residents, that is, people who live for only some part of the year (perhaps summer or winter) in a particular region. In one sense, they may have legal rights as citizens to participate in decisions
about the community, but they may also be profoundly different from permanent (year-round) residents. In some cases, especially in areas of southern France, Spain, rural areas of Italy, and beautiful places anywhere, the seasonal residents may be much wealthier than permanent residents and may come from different cultural backgrounds (e.g. from England, Germany, or The Netherlands). In other cases, they may be itinerant workers going from harvest to harvest in search of work and may be much poorer than local residents. In either case, their presence can lead to seasonal demands on infrastructure and can lead to changes in cultural and social values when the seasonal residents are socially and/or culturally dissimilar to the local population.

- **Presence of weekenders.** Similar to seasonal residents is the phenomenon of weekenders. This refers to the influx of people who do not live permanently in the community, but who regularly visit, say on weekends, and who may own property in the community. They may be different from permanent residents, and conflicts about issues affecting the community may develop. Because the primary affiliation of weekenders is to some other place, and because expenditure patterns and regional multipliers for weekenders do not augur well for economic activity in the community, projects that lead to large increases in the number of weekenders may cause social impacts.

- **Presence of tourists and day-trippers.** The presence of tourists may be seen as a source of revenue for local populations, but it can also lead to a wide range of social impacts, especially when the tourists are substantially different from local people. The range of services demanded by tourists means that the local community changes. Tourism can also cause local inflation or price escalation.

- **Resettlement** refers to coopted or coerced process by which local people surrender land for a project (such as dam) and are relocated elsewhere as part of a compensation package.

- **Displacement and dispossession** refer to the processes by which development projects and policies cause people to lose land and other assets, or lose access to resources, but for which they are not (adequately) compensated. The land lost may be their homes or agricultural lands, or other areas on which they are dependent for resources. Displacement may result in physical dislocation, loss of income, and other related processes and impacts such as impoverishment, social disintegration, etc.

- **Rural-to-urban migration.** Many projects accelerate the rate of rural-to-urban migration as jobs or social services become increasingly only available in the cities, or because of a growing perception of the attractiveness (lure) of life in the city (cultural hegemony). This form of migration has consequences both for rural areas (declining viability and vitality, changed demographic structure) but also for urban areas in that it creates areas of rapid housing growth, especially in the rural/urban fringe (periurban development), and may lead to large slum areas. Urban infrastructure becomes stretched because it cannot meet the increasing demand.

- **Urban-to-rural migration.** In many European countries with improved transportation and communication networks, many previously urban people are
now choosing to live in rural environments, significantly altering the demo-
graphic and cultural characteristics of those areas.

6.2. Economic processes

Economic processes are those that affect the economic activity in a region including the way people make a living, as well as macroeconomic factors that affect society as a whole. They include the following.

- **Conversion and diversification of economic activities.** Planned interventions (projects and policies) may stimulate a process of change in the nature of economic activity from one type of production to other types of production. At the macrolevel, this might be from agricultural to industrial forms of production. At lower levels, it might be from subsistence farming to cash cropping. In the commercial sector, it might be from small family-owned-and-operated small holder businesses to larger companies with a workforce or employees.

- **Impoverishment** is the process by which certain groups in society experience a downward spiral of poverty, usually involving displacement (loss of land or access to resources and markets) and disempowerment (loss of power in decision making).

- **Inflation** is a process of escalating prices. It can occur at the national level as a result of macroeconomic factors, or it can occur at local levels caused by the spending power of increasing numbers of high-income people, which may arise through expansion of tourism, presence of imported workers, etc.

- **Currency exchange fluctuation (devaluation).** Changes in the exchange rates of local currency can have major effects on a community. Fluctuation itself creates uncertainty and a degree of hedging that can have profound effects on the economy and society including hoarding and shortages. Devaluation increases the costs of both imported and local goods (at least those that are potentially exportable). Commodities like oil become increasingly expensive, and this contributes to inflation generally.

- **Concentration of economic activity.** At the sectoral level, concentration of economic activity refers to the lack of diversification in the country as a whole— it refers to concentration of activity in a single industry. This makes the society and nation vulnerable to the fortunes of that commodity. At geographical scale, it refers to concentration of economic activity in a small number of places. This potentially leads to uneven economic development across the country. Sometimes, both sectoral and geographical concentration occur together, both at national levels (such as in Papua New Guinea with reliance on a very small number of mines, giving the mining companies a very large influence in the nation’s affairs), and at very local levels when the phenomenon of boomtown or company town can occur. Boomtowns and company towns can have major influences on people’s lives depending how they are organised.

- **Economic globalisation (conversion to global market-oriented production).** Globalisation— i.e. the incorporation of the local into the global— of the local economy is a multifaceted process. It means that economies change from being
locally oriented to being globally oriented. This means that locally produced goods have to compete with imported goods (which may be cheaper). It also means that the focus of local production changes towards international markets instead of local or regional markets. This can have profound influence on the environment and on other activities. For example, the transition from traditional mixed agriculture to monocropping of cash crops, and the shift from payment in kind to payment in cash, may have serious impacts on households primarily dependent on agriculture.

6.3. Geographical processes

Geographical processes are those that affect the land use patterns of a society, including the following.

- **Conversion and diversification of land use.** Planned interventions may also lead to a change in the way land is utilised, both in terms of the area of land appropriated for a particular activity (extensification), the intensity of utilisation of the land (intensification) through the use of artificial inputs and whether there are areas of land not utilised for production, and in the type of land use activities and the pattern or mix of those activities.
- **Urban sprawl** is the expansion of urban areas into previously rural or peri-urban areas with associated land use changes and pressure on urban infrastructure.
- **Urbanisation** is both the process that promotes rural-to-urban migration, as well as the process of transforming smaller centres (towns) into more densely populated cities, resulting in a change in social relations of those who live there.
- **Gentrification** is the process whereby usually inner city suburbs become converted from lower class areas to middle or upper class suburbs. It has significant impacts on the existing residents, particularly the lower-income renters who may no longer be able to afford to live in what once might have been their community.
- **Enhanced transportation and rural accessibility.** Improvements in transport facilities result in increased accessibility, which results in various demographic changes. At a macrolevel (such as through improved air travel), it can mean increased tourism and the cultural consequences that flow from exposing new regions to tourism. At local levels (such as through improved ground transportation, e.g. better roads), it can result in the presence of newcomers, week-endsers, or the development of rural areas as dormitory suburbs for the city. It can also result in telework where urban professionals conduct business from their country homes. In all cases, it means substantial change for the previously less accessible areas.
- **Physical splintering.** Infrastructure projects like highways, railways, transmission corridors, irrigation canals, and the impoundment of water can lead to the physical division or splintering of communities, which can lead to social impacts such as loss of social networks, loss of access to resources, and, in the worst cases, to displacement and dispossession.
6.4. Institutional and legal processes

Institutional and legal processes are those processes that affect the efficiency and effectiveness of various organisations that are responsible for the supply (and security of supply) of the goods and services on which people depend. These organisations include government agencies, nongovernment organisations, and the commercial sector. Important processes include the following:

- **Institutional globalisation and centralisation.** The incorporation of the local into the global in terms of institutions related to the loss of autonomy of decision making at the local level. Local organisations are increasingly required to do what central management dictates, whether or not what is being stipulated is locally relevant.
- **Decentralisation.** Somewhat as a counter force to institutional globalisation is the process of decentralisation, that is, of change from a centralised to a decentralised public administration system. This can lead to impacts on the workload at local community levels and to the adequacy of services.
- **Privatisation** refers to the process of transfer of responsibilities from the public to the private sector. It is often associated with the sale of state-owned enterprises.

6.5. Emancipatory and empowerment processes

Emancipatory and empowerment processes are ones that lead to an increase in the ability of local people to affect (contribute to) the decision making that affects their life.

- **Democratisation** is the process by which people are granted increased influence in political decision making.
- **Marginalisation and exclusion** refer to the processes by which various groups in society are denied access to services or to participation.
- **Capacity building** refers to increasing knowledge, networking capacity, and increasing skill base amongst local people.

6.6. Sociocultural processes

Sociocultural processes are those that affect the culture of a society, that is, all aspects of the way that people live together, including the following:

- **Social globalisation.** The incorporation of the local into the global at the sociocultural level refers to the change in the nature of the local culture, particularly as a result of the cultural hegemony of American cultural expression, often described as McDonaldization or ‘Coca-Cola development.’ American fast food competes with local food, American popular culture (music, cinema, dress) competes with local costume and custom. Many ‘normal’ Western products
(including medicine and contraceptives) become locally available creating a challenge for the preservation of local culture and local values.

- **Segregation** refers to the process of creation of social difference within a community.
- **Social disintegration** refers to the dissolving or loss of social capital, the falling apart of social, cultural, and kinship networks, and the abandonment and lack of relevance of cultural practices. Cultures have well-developed systems that allow them to cope with a degree of change, provide survival mechanisms, and provide for the effective functioning of those societies. When change is too rapid, or when there are exogenous shocks with which the system cannot cope, there may be disregard for traditional cultural practices by members of society, which means that the culture does not provide the benefits it once did. This is a double bind, because there is an expectation by some members of the society that these systems should work, and because they were in place in the past, there are not alternative mechanisms to provide for those services in the present when those cultural practices are not adhered to.

- **Cultural differentiation** refers to the increase in the differences, or perceived differences, between various groups in a community based on cultural values, traditions, rituals, language, traditional skills, etc. This process of ‘othering’ creates division within a community.

In addition to the above-mentioned sociocultural processes is the issue of deviant social behaviour. Sociologically, deviant behaviour is a feature of a society and is therefore a part of the culture. It is well accepted that various planned interventions (projects) lead to an increase in various types of social behaviours that might be considered deviant or antisocial by some. It is rather more difficult to argue that an increase in these behaviours necessarily leads to cultural change. Nevertheless, these issues are important, because they cause division in the community. For example, many projects lead to an increase in prostitution. The presence of construction workers and tourists — in both cases, groups eager to utilise the services of prostitutes and with the economic means to pay for them — will lead to the movement to the area of prostitutes, or the supply of prostitution services by local women (and men). Prostitution, in itself, is not a social impact. However, prostitution can cause social impacts such as health impacts (through the spread of HIV and other sexually transmitted diseases). Prostitution may cause moral outrage, a range of gender impacts, and other concerns. It also provides economic opportunities and employment — which, in fact, can lead to further social impacts. Prostitution itself is not an (experienced) impact, but in this schema, it is considered to be a social activity (process) that leads to impacts.

Various other social behaviours are treated in a similar way, for example, alcohol consumption, legal and illegal drug use, other types of substance abuse (such as petrol, glue, and solvent sniffing), various types of risk taking behaviours, gambling, and vandalism. They can have serious impacts on the social and economic well-being of the community, as well for the individuals/households involved. While these social behaviours can be caused directly by
planned interventions and the impacts of these social behaviours might be avoided by good mitigation, these kinds of behaviour can also be a sign of social tension in the community as well as create social tension.

6.7. Other processes

The list of social change process given above is not intended to be complete and, in fact, it is argued that no list could ever be complete. New technologies and new social phenomenon continuously occur, and it is impossible to predict them and their likely social influence. For example, 20 years ago (and maybe even 10 years ago), who could have predicted the social impact of the Internet? It is always important to be aware that new processes are always potentially arising and that SIA theory and practice must never become stagnant. It is also clear that processes are not uniquely definable, conceptually clear, or mutually exclusive phenomena. They are theoretical constructions that provide explanation for what the observer is seeking to describe or explain. Thus, the types of processes identified by a particular theorist is linked to the purposes, objectives, and interests of the observer.

There are different levels at which social processes can be described. Some social processes are macroprocesses that entail many other processes. For example, in the SIA literature, there is often discussion of normalisation (see inter alia Brealey et al., 1988)—the process by which boomtowns become normalised communities. This is, in fact, a complex process that involves many subordinate changes, including demographic changes, economic changes, geographical changes, institutional and legal changes, sociocultural changes, and quite possibly emancipatory changes as well.

7. Social impact variables and concepts

In this paper, the need for a reconceptualisation of the nature of social impacts has been emphasised. Social change processes need to be differentiated from social impacts that are experienced or felt in corporeal or perceptual terms. The SIA literature has confused impacts and social change processes. While an overview of the social change processes that occur is given above, an outline of the indicative social impacts (concepts) is given below. It should be noted very strongly that this is not a checklist of possible impacts of any particular project, nor is it a list of variables or indicators. As repeatedly indicated, checklist thinking does not encourage the analytical thinking about the impact causing mechanisms that lead to impacts, especially the second- and higher-order impacts, and the indirect impacts. The variables that are important must be locally defined, and there may be local considerations that a generic listing does not adequately represent. In addition, any listing is a product of its author’s conceptualisation about what impacts to include and how they should be
described. A key factor is the level of detail that describe compound impacts. Given the interests, disciplinary backgrounds and allegiances of the author of this listing, it is quite likely to exhibit a Western bias and may not adequately represent economic and institutional impacts. The list was developed progressively by reviewing the SIA literature, SIA/EIA reports, and socioenvironmental impact statements, and by tapping into the practical experiences of SIA and EIA consultants including personal experiences.

The concepts that are presented are dimensions of the individual, family, community, and societal experience of social impacts and vary in their specificity. Some are macroconcepts that may be difficult to measure, while others may lend themselves to operational definition, variable creation, and measurement easily. For the purposes of this paper, however, the intention was only to expand or broaden the understanding of social impacts.

Social impacts must be experienced or felt. To be true to the broad definition of SIA used (i.e. Vanclay’s, 2002 definition), the list of impacts must potentially be capable of addressing positive benefits, as well as negative ones. In addition, because social impacts (that is, all impacts on humans) cover a wide variety of issues, the list must be broad. Some impacts are experienced at the level of an individual, other impacts are experienced at the level of a family or household unit, and other impacts are experienced by social organisations, institutions, or a community or society as a whole. Some impacts are corporeal — that is, felt by the body as physical reality — other impacts are perceptual or emotional. Some macrolevel impacts are quite removed from individuals but nonetheless are important social impacts.

The conceptualisation of social impacts has been divided into seven categories. The categorisation is intended to provide a general grouping to assist in thinking about the range of impacts. It is accepted that others may well group impacts in different ways.

<table>
<thead>
<tr>
<th>Box A: Indicative Health and Social Well—being Impacts</th>
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<tbody>
<tr>
<td>✷ Death of self or a family member — personal loss.</td>
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<td>✷ Death in the community — loss of human &amp; social capital.</td>
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<tr>
<td>✷ Nutrition — adequacy, security and quality of individual and household food supply.</td>
</tr>
<tr>
<td>✷ Actual health and fertility (ability to conceive) of family members.</td>
</tr>
<tr>
<td>✷ Perceived health and fertility.</td>
</tr>
<tr>
<td>✷ Mental health and subjective well—being — feelings of stress, anxiety, apathy, depression, nostalgic melancholy, changed self image, general self esteem (psycho-social factors).</td>
</tr>
<tr>
<td>✷ Changed aspirations for the future for self and children.</td>
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<tr>
<td>✷ Autonomy — changes in an individual’s independence or self-reliance.</td>
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<tr>
<td>✷ Experience of stigmatisation or deviance labelling — the feeling of being ‘different’ or of being excluded or socially marginalised.</td>
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<tr>
<td>✷ Uncertainty — being unsure about the effects or meaning of a planned intervention.</td>
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<tr>
<td>✷ Feelings (positive or negative) in relation to the planned intervention — which may result in formation of interest groups.</td>
</tr>
<tr>
<td>✷ Annoyance — a feeling/experience such as due to disruption to life, but which is not necessarily directed at the intervention itself.</td>
</tr>
<tr>
<td>✷ Dissatisfaction (betrayal) due to failure of a planned intervention to deliver promised benefits.</td>
</tr>
<tr>
<td>✷ Experience of moral outrage — such as when a planned intervention leads to violation of deeply held moral or religious beliefs.</td>
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</table>
Health issues are social issues. Health impact assessment (HIA) (see Birley, 1995; Birley and Peralta, 1995) is needed as a process to identify the health impacts. While HIA professionals have a wide range of health indicators they consider, the dimensions listed are the ones likely to be important from a social perspective. Death is perhaps the most severe impact that can be experienced by an individual, and also has major consequences for other members of the family or household (both in terms of grieving and economic impacts if the deceased is a major contributor to the household economy). Death also has a community level impact in terms of the loss of human and social capital. It is often said that one of the greatest impacts of many projects is the uncertainty or fear associated with a project, and that the impacts that are perceived in anticipation of the planned intervention can be many times greater than the impacts that ultimately result from a planned intervention (Burdge and Vanclay, 1995). Somewhat related to this, although in an opposite direction, is that some interventions raise expectations about what will come, more jobs, more economic growth, etc. Quite a few interventions are accepted by many communities on the basis of a cargo-cult mentality. In these cases, usually the promised flow-on development does not occur. Proponents too often exaggerate the benefits of projects in order to secure approval. In one example, in a logging community in Australia, some 600 forestry jobs were promised by the company. Only 1 year later, only 34 jobs had eventuated with the company claiming that there had been technological improvements with new logging and wood processing technologies requiring less workers. According to a member of the local government (personal communication), the local community felt that they had been cheated. When there are heightened expectations caused by projects, disappointment, resentment, or dissatisfaction can result.

Other emotional concepts include the feelings created by being marginalised in society, such as through a process of the creation of social divisions within a community. People with strong views or moral codes may experience moral outrage as a result of certain projects or policies. For example, the legalisation of prostitution in Australia, and the creation of brothels in many local government areas, has caused a great deal of moral outrage amongst certain sections of the community. The placement of needle exchange services, used syringe containers, and discussion about the distribution of syringes and condoms in prisons has also evoked strong moral outrage. While planned interventions (projects or policies) are more likely to invoke feelings of upsetness or resentment, some projects or policies may create positive feelings. These feelings (positive or negative) may result in formation of interest groups, sometimes used as an indicator of the degree of feeling in the community about an issue.

Yet, another emotional feeling, especially for older citizens, is nostalgic melancholy. The experience of change and other changes in the community can lead to a situation where they dream constantly of the past, the “good old days.” An issue in the mitigation of social impacts is whether there should be reminders of the past. This is particularly the case in resettlement. Reminders of the previous village can invoke feelings of nostalgia. On the other hand, like grief experiences,
reminders of the past allow people to process their feelings and adjust better. In resettlement, especially where there is to be inundation or destruction of buildings, decisions need to be made about whether buildings need to be relocated. In some cases, for example, in the case of some towns that were inundated in the Snowy Mountains Hydro Electricity Scheme in Australia, whole villages (buildings and all) have been relocated. In other cases, villages have been submerged with perhaps only one or two significant buildings being relocated. A special consideration in the case of inundation is whether there will be protruding reminders of the village, such as church spires. It needs to be recalled that such protrusions can be irregular, such as at times of exceptional low water levels. The community needs to be consulted in relation to these matters. Some communities chose actively to keep such protrusions as a gentle reminder (and as a way of coping), others may choose to have buildings relocated or destroyed so that the reminders of the past are removed.

<table>
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<tr>
<th>Box B: Indicative Quality of the Living Environment (Livability) Impacts</th>
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<tbody>
<tr>
<td>☑ Perceived quality of the living environment (i.e. work and home environment or neighbourhood) – in terms of exposure to dust, noise, risk, odour, vibration, blasting, artificial light, safety, crowding, presence of strangers, commuting time etc.</td>
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<tr>
<td>☑ Actual quality of the living environment.</td>
</tr>
<tr>
<td>☑ Disruption to daily living practices (which may or may not cause annoyance).</td>
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<tr>
<td>☑ Leisure and recreation opportunities and facilities.</td>
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<tr>
<td>☑ Aesthetic quality – visual impacts, outlook, vistas, shadowing etc.</td>
</tr>
<tr>
<td>☑ Environmental amenity value – the non-market, non-consumptive aesthetic and moral value ascribed to a location or experience.</td>
</tr>
<tr>
<td>☑ Perception of the physical quality of housing.</td>
</tr>
<tr>
<td>☑ Actual physical quality of housing.</td>
</tr>
<tr>
<td>☑ Perception of the social quality of housing (homeliness) – the degree to which inhabitants feel that their house is their ‘home’.</td>
</tr>
<tr>
<td>☑ Availability of housing facilities.</td>
</tr>
<tr>
<td>☑ Adequacy of physical infrastructure – impact on the existing infrastructure of the community (water supply, sewage, land, roads, etc.).</td>
</tr>
<tr>
<td>☑ Adequacy of social infrastructure – change in the demands for and supply of basic social services and facilities, such as education, police, libraries, welfare services, etc.</td>
</tr>
<tr>
<td>☑ Perception of personal safety and fear of crime.</td>
</tr>
<tr>
<td>☑ Actual personal safety and hazard exposure.</td>
</tr>
<tr>
<td>☑ Actual crime and violence.</td>
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</table>

A second major category of social impact relates to the quality of the living environment, or in other words, the liveability of the neighborhood and workplace. This category contains many of the variables traditionally considered in SIA and EIA studies. Some of these variables relate directly to the physical environment and in the Slootweg et al. (2001) model (see Fig. 1) come through the pathway from the biophysical impacts. Exposure to dust, exposure to noise, exposure to artificial light, exposure to odors, and similar issues could all be given as individual impacts but have been grouped under this single heading, “quality of the living environment.” This macroconcept has both a perceptual dimension and an actual dimension. Because of the significance of one’s own house as a place to live, concepts related to housing are also included, separate from quality of the living environment (which might be regarded as outside of the home). Housing indicators include adequacy of housing in the community, as well as perceived and actual physical quality of housing. In addition, a perceived
social quality of housing indicator is included. One finding from rehousing projects is that even though the physical quality of houses may improve, many resettled people find that their new house is not ‘home’ anymore. This view is also one of the reasons why people are reluctant to move, even when compensation packages are generous.

At the community level, the adequacy of infrastructure, both physical and social, is a major area for potential impacts. Population growth, especially rapid growth, in a community can mean that the physical limits of existing infrastructure are reached. Town water supplies and the local sewerage system may not be able to cope with the increased demand. Social services and social facilities, too, may not be able to cope.

Also included in the liveability grouping is how people feel about their surroundings. Recreational opportunities near where they live or holiday, and the aesthetic quality of the places with which they are familiar are also listed under this heading. A final concept is of environmental amenity value, sometimes referred to as existence value (McNeely et al., 1990). This refers to the nonmarket, non-consumptive value of a place or experience—in other words, the vicarious satisfaction experienced by people in relation to their knowledge about a place or object. Potentially, it also includes the moral or intrinsic values that may be ascribed to a place or species (as in the case of biodiversity protection) (Norton, 1988). These values can be affected by desecration of the place or by changed knowledge or meaning about the place. A forest that has been logged is no longer ‘pristine.’ A natural area that has a road put through is no longer ‘wilderness.’ A river that has been dammed or otherwise modified is no longer ‘wild.’

| Box C: Indicative Economic Impacts and Material Well-being Impacts |
| Workload – amount of work necessary in order to survive and/or live reasonably. |
| Standard of living, level of affluence – a composite measure of material well-being referring to how well off a household or individual is in terms of their ability to obtain goods and services. It is also related to the cost of living, and is affected by changes in local prices etc. |
| Access to public goods and services. |
| Access to government and/or other social services. |
| Economic prosperity and resilience – the level of economic affluence of a community and the extent of diversity of economic opportunities. |
| Income – both cash and inkind income. |
| Property values. |
| Occupational status/prestige and type of employment. |
| Level of unemployment in the community – underutilisation of human capital. |
| Loss of employment options. |
| Replacement costs of environmental functions – the cost of replacing a product or service that was formerly provided by the environment, such as clean water, firewood, flood protection, etc. |
| Economic dependency or vulnerability – the extent to which an individual or household (or higher entity) has control over economic activities, the degree of incorporation into larger production systems. |
| Disruption of local economy – the disappearance of local economic systems and structures. |
| Burden of national debt – such as the intergenerational transfer of debt. |

Economic impacts and material well-being relate to the wealth and prosperity of individuals and the community as a whole. While employment opportunities,
income, and property (real estate) prices might be obvious impact variables in industrialised countries, issues like workload — that is, the amount of work that is required in order to live reasonably — is more important in a development context. Some concepts can be quite complex. Income in some African villages, for example, might not be shared in the household, so a conversion to cash cropping that brings cash income to men, might not result in reduced workload for women. The gendered differentiation of income is considered separately in the group of variables dealing with gender relations. Property prices (real estate values) is also a complex measure. Rising property prices is not necessarily a social good. Rising property prices is only a personal individual good if this commercial value is to be realised through sale or through mortgage. In general terms, high property prices excludes locals (or the children of local people) from access to property. Certain rural areas, such as southern France, Spain, and Wales, are subject to land purchases by foreigners, thereby creating a local inflation of property prices. To restrict this trend, in the Peak District of England near Manchester, for example, regulations have been implemented to restrict settlement to genuine local people.

Another important impact, rarely considered in SIA, is the burden of national debt. When governments borrow money to build dams or for the construction of other major infrastructure, or to finance structural adjustment, it is easy to consider the immediate social impacts of the development project or loan itself. However, the money borrowed is a burden for future generations that must be repaid. That, too, is a social impact. When current pension schemes provide generous benefits for current older age persons but that are funded not from the contribution of those older age persons during their own lifetimes but from the contributions of currently working people, there is a potential financial burden on future generations, especially given the changing demographic structure of Western societies (Kotlikoff, 1992).

**Box D: Indicative Cultural Impacts**
- Change in cultural values — such as moral rules, beliefs, ritual systems, language, and dress.
- Cultural affrontage – violation of sacred sites, breaking taboos and other cultural mores.
- Cultural integrity — the degree to which local culture such as traditions, rites, etc. are respected and likely to persist.
- Experience of being culturally marginalised – the structural exclusion of certain groups because of their cultural characteristics, thus creating a feeling of being a second class citizen.
- Profanisation of culture — the commercial exploitation or commodification of cultural heritage (such as traditional handicrafts, artefacts) and the associated loss of meaning.
- Loss of local language or dialect.
- Loss of natural and cultural heritage — damage to or destruction of cultural, historical, archaeological or natural resources, including burial grounds, historic sites, and places of religious, cultural and aesthetic value.

Cultural impacts include all impacts (changes) on the culture or cultures in an affected region, including loss of language, loss of cultural heritage, or a change in the integrity of a culture (ability of the culture to persist). Cultural affrontage implies the violation or desecration of sacred sites, or the violation of cultural
taboos. A commonly reported cultural impact, especially in relation to tourist areas, is profanisation of culture through the commodification of cultural (sometimes sacred) artefacts for sale to tourists, and the loss of meaning to those objects as a result.

**Box E: Indicative Family and Community Impacts**
- Alterations in family structure – such as family stability, divorce, number of children at home, presence of extended families.
- Changes to sexual relations.
- Obligations to living elders.
- Obligations to ancestors.
- Family violence – physical or verbal abuse.
- Disruption of social networks – impacts on the social interaction of household members with other people in the community.
- Changed demographic structure of the community.
- Community identification and connection – sense of belonging, attachment to place.
- Perceived and actual community cohesion.
- Social differentiation and inequity – creation of perceived or actual differences between various groups in a community or differentiation in level of access to certain resources.
- Social tension and violence – conflict or serious divisions within the community.

Family and community impacts includes impacts related to the family, social networks, and the community generally. A change to family structure is a major family impact that can be caused by the enticement away from home of young people, or by the periodic or long-term absence of adults for work. Various changes to life can cause disruption to sexual relations and to social networks. Changes in the community can affect perceived and actual community cohesion and the extent to which residents like where they live and/or feel that they belong there (community identification, attachment to place). The creation of social division within the community is a social impact, as is the creation of tension or hostility. Obligations to living elders or to deceased ancestors can also be problematic, especially where resettlement or physical splintering occurs. In some Asian cultures, the need to fulfil obligations to ancestors is a strongly held belief protecting one’s own good fortune in the after-life, and this means that current or future material well-being (such as through compensation for resettlement) cannot be traded off against this obligation.

**Box E: Indicative Institutional, Legal, Political and Equity Impacts**
- Workload and viability of government or formal agencies – capacity of the formal institutions to handle additional workload generated by a planned intervention.
- Workload and viability of non-government agencies and informal agencies including community organisations.
- Integrity of government and government agencies – absence of corruption, competence in which they perform their tasks.
- Loss of tenure, or legal rights.
- Loss of subsidiarity – a violation of the principle that decisions should be taken as close to the people as possible.
- Violation of human rights – any abuse of the human rights, arrest, imprisonment, torture, intimidation, harassment etc., actual or fear or censorship and loss of free speech.
- Participation in decision making.
- Access to legal procedures and to legal advice.
- Impact equity – notions about fairness in the distribution of impacts across the community.
There is a range of impacts on institutions, such as regulatory agencies, those that lead to exceeding the capacity to cope with the extra workload that is generated by development activities. Many development projects are promoted by large corporations who have strong commercial interests in seeing their project approved with a minimum of delay and minimal conditions of approval. This creates a potential for the offering of bribes (graft) and other favours in return for favourable treatment. Individuals can have their legal and human rights violated, or be subject to intimidation or harassment. Governments may quell publication of opposing views or dissent in relation to a particular project. Protecting the freedom of speech is an important aspect of (social) impact assessment. Other times, higher level governments (or authorities) may overrule a local or state (provincial) government (or authority) and members of that lower government or authority and their constituents may feel that the principle of subsidiarity is violated. This principle, from the European Union, refers to the notion that decisions should be taken as close to the people that are affected by a decision as possible.

A recent World Bank (2001, p. 1) report on the role of gender in development began with the words “Gender discrimination remains pervasive in many dimensions of life — worldwide. . . . In no region of the developing world are women equal to men in legal, social, and economic rights. Gender gaps are widespread in access to and control of resources, in economic opportunities, in power and political voice.” Women tend to bear the largest and most direct social impacts. For these reasons, gender is a core social impact issue, and a development objective in its own right, requiring explicit consideration in the form of gender assessments (DGIS, 1994; Feldstein and Jiggins, 1994; Gianotten et al., 1994; Guijt and Shah, 1998; NEDA, 1997; Peiris, 1997). While all social impacts should be gender disaggregated — which means that there needs to be a separate consideration of the

<table>
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<th>Box C: Indicative Gender Relations Impacts</th>
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<td>❖ Women’s physical integrity — refers to the right of women to be able to make informed decisions about their own body, health and sexual activity, having control over fertility and childbearing and child-rearing practices, and having the resources to implement those decisions safely and effectively, and to be free from coercion, violence and discrimination in the exercise of those decisions.</td>
</tr>
<tr>
<td>❖ Personal autonomy of women — the level of independence, self-reliance and self-respect in physical, economic, political and socio-cultural aspects.</td>
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<tr>
<td>❖ Gendered division of production-oriented labour — refers to the unequal distribution of workload between men and women in relation to production, in terms of cash cropping, subsistence food production, wage-labour and other household (cash) income strategies.</td>
</tr>
<tr>
<td>❖ Gendered division of household labour — refers to the gendered and uneven distribution of workload in relation to the maintenance of the household, that is fetching water and fuel, preparing food, washing, cleaning and decorating the house.</td>
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<tr>
<td>❖ Gendered division of reproductive labour — refers to the gendered and uneven distribution of workload in relation to the care and maintenance of household members, that is the personal burden of childbearing and childrearing.</td>
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<tr>
<td>❖ Gender-based control over, and access to, resources and services — including land, water, capital, equipment, knowledge, skills, employment opportunities and income, and services such as health facilities, education and agricultural extension services.</td>
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<tr>
<td>❖ Equity of educational achievement between girls and boys.</td>
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<tr>
<td>❖ Political emancipation of women — women’s influence on decision making at household, community and society levels.</td>
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</table>
social impacts on women as well as on men — there also needs to be a consideration of the impacts on gender relations. To this end, eight dimensions of gender relations impact can be conceived, which cover the major areas in which gender differentiation takes effect, and each can be the focus of improvement. In undertaking gender analysis, it is important not to homogenise women. The social position and likely impact experience of women are different from men, but there is also diversity amongst women that also needs to be appreciated.

8. Conclusion

Despite rhetoric in SIA about considering the benefits of planned interventions, as well as the negative impacts, and about considering the impacts of policies and programs, as well as projects, it is clear given the variables typically considered in SIA studies and that comprise the variable lists of the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994) and others, that there is no consideration given to the indicators that would be necessary to describe the positive benefits of projects, or the different impacts that are invoked when the consequences of policies and programs are considered, as well as those of projects. In the list of social impacts presented, although still potentially inadequate and perhaps still affected by a Western cultural bias, there has been specific consideration given to expanding consideration from negative to include positive, from unintended consequences to include intended consequences, and from the impacts of projects to include the impacts of policies and programs.

The listing of indicative social impacts does capture most of the potential social impacts that are likely to occur across a range of planned interventions. However, while awareness of the list is useful for expanding awareness of the full range of social impacts, the list should not be used as a checklist. Because of the existence of second- and higher-order impacts, the complex iterative processes by which impacts are caused, and the complex impact pathways and causal chains, a thorough analysis using the conceptual framework of Slootweg et al. (2001) is advocated. Awareness of the local meaning associated with impacts is also important.

An important dimension of the conceptual framework is the separation of the concept of social change process from the concept of social impact. This is an important conceptual distinction not previously made in the SIA literature. It is clear that many previously measured SIA variables are not in themselves social impacts, but rather social change processes or intervening variables that might lead to social impacts under certain conditions, depending on the characteristics of the impacted community and of any mitigation measures.

Through a greater awareness of the processes by which impacts are caused, acceptance of the potential for a greater range of impacts such as presented here, and by utilisation of the Slootweg et al. (2001) conceptual framework, better
scoping of SIA studies will occur, leading to better impact predictions. This will improve SIA and EIA studies, and potentially to better planned interventions and improved quality of life in affected communities.

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References


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