PSYCHO-SOCIAL IMPACTS OF RESOURCE DEVELOPMENT: RESEARCH STRATEGIES—AN OVERVIEW OF ISSUES

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ABSTRACT

The multiple parameters of the resource development experience are outlined to provide a theoretical frame of reference for the study of these complex interactive systems. The concepts of impact and impact assessment are analysed with reference to individuals, communities, and development projects. Three major contextual dimensions of resource development experience are discussed: the model of development, the social and cultural context, and the population characteristics.

INTRODUCTION

Resource development is not just a specific economic change but is usually a complex social change with a wide variety of impacts—some positive, some negative. On the positive side, economic development offers employment and financial resources—factors that the health literature show to be positively related to physical, psychological and social well-being. On the negative side there are occupational health hazards, job pressures, isolation, dislocation, change of cultural values, etc. Further, since much Canadian resource development involved commodities that fluctuate in demand and price in response to business cycles and international markets, there is the additional impact of boom and bust cycles.

Assessment of the psycho-social impact of resource development requires a series of studies which identify pre-impact and post-impact patterns. Effective planning that seeks to minimize the negative impacts of resource development and maximize the positive impacts of resource development requires that these pre- and post- impact studies be firmly grounded.

At its most elemental level (to borrow from Bowles, 1981) the notion of impact assumes

that: (1) there is a defined individual and community with more or less stable patterns of social behavior, interpersonal interactions, and life style; (2) some identifiable intervention—resource development—takes place; (3) this intervention has consequences which produce changes in self-concepts, pattern of activities, social relationships and lifestyle; and (4) these changes are different from, or in addition to, those which would have occurred as a consequence of processes already operating within the individual and the community.

In simple terms the resource development is the stimulus, and the changes are a response. However, in reality, there are complex patterns of interactions between ongoing community and personal processes and the resource development effects. It is not a simple linear relationship.

To assess impact is much more difficult as local communities and the individuals who are members of them are not static but rather by their very nature dynamic and changing. As Bowles (1981) writes, "A local community is a concrete context in which broad historical trends and forces operating during the epoch are expressed in the institutional patterns which individuals encounter in the

course of their daily lives." Individuals are also concrete contexts with feelings, emotions and thoughts that are expressed in social action in the course of their daily lives.

Psycho-social impact assessment must take into account the more general processes of change which are occurring in society in specific communities, and in individuals at the time.

Individuals, communities and resource development projects differ among each other along a variety of dimensions.

The impact of the complex social change brought about by resource development is influenced by a variety of contextual parameters surrounding the development. It is obvious these contextual parameters—different initial conditions—will shape and influence the impact of a resource development.

I wish to draw attention to some of the implications of three major contextual parameters or dimensions:

- I The model or type of development
- II The social and cultural context
- III Population characteristics

These dimensions of the resource development itself and the host or receiving community shape the *nature, intensity* and *scope* of the impact of a specific resource development. They should also influence the foci of research efforts and the research strategies and designs that are utilized to explore these foci.

I MODEL OR TYPE OF DEVELOPMENT

When one begins to discuss the impact of resource development the image usually conjured up is that of an isolated, relatively small northern community with a single resource extraction industry.

This is not the only model or type of resource development.

Another type of resource development is that of the work/camp site in which a perma-

nent community is not developed. Workers, administrative and management staff are transported in (usually by air) to work a compressed schedule—e.g. 10 days on; 12-hour day; 10 days off.

Off-shore oil and natural gas rigs, and open pit uranium mines in Northern Saskatchewan are of this type?

Obviously the question of whether one has a more diverse community population or a narrower work camp population affects the kind of impacts, range of problems and benefits brought about by resource development.

Developments also differ in terms of:

- Manpower Requirements*—numbers required, types and levels of skills required.
- Technology Involved*—e.g. noxious chemicals, radio-active materials, mechanical equipment hazards, etc.
- Work Hazards*—e.g. open pit versus shaft mining, etc.
- Remuneration and Benefits*—levels and types of remuneration and benefits.
- Work Schedules*—compressed—non-compressed work week, shift work, individual or group contract for work gangs, flexibility, etc.
- Work Stress*—job pressure, opportunity, autonomy, work/non-work conflict, etc.
- Affirmative Action Program*—presence/absence, nature of, etc.

The particular constellation of such attributes will affect the impact of resource development upon a community and upon the individuals who are members of that community.

II SOCIAL AND CULTURAL CONTEXT

The characteristics of the host community are important independent attributes influencing the nature and intensity of the impact of resource development.

Resource development can occur in small hinterland isolated communities, in more

metropolitan rural areas, in small towns, near larger diversified urban areas, etc. Indeed the resource development can occur without the presence of any host community to be impacted upon.

The social structural dimensions of host communities shape and influence the impact of a resource development.

One may look at the social structural dimensions of the host (impact) communities in terms of:

Presence—absence of a host community.

Isolation (physical and cultural)—High
(---) Low

Type of Community—Small (---) Large

Local economies can be differentiated along the following lines:

The Economic Base

Hunting/Gathering (---) Agricultural
(---) Industrial

Non-Diversified (---) Diversified

Degree of Cash (---) Non-Cash Transaction in the Economy

Blishen, Lockhart, Cxoib and Lockhart (1979: 53-60) in discussing what they term as the *economic vitality* of communities, list a variety of additional attributes such as attitudes toward economic security, opportunities for specific skills acquisition, inhibitions to local initiatives, and perceptions of economic opportunities.

One might also consider other structural features of host communities that affect the impact of resource development. Communities differ in terms of their patterns of socialization of new members, social control, social participation and mutual support. Blishen et al. (1979) talk of the dimensions of social vitality and political efficacy.

Social vitality is concerned with:

- assistance norms
- social problem resolution
- conflict resolution
- status recognition and mobility norms
- proprietorial norms

Political efficacy is seen to refer to:

- participation and decision-making
- internal communication
- internal mediation and resolution norms for significant disagreements
- external representation and negotiation

Just as communities differ in social, structural and cultural dimensions so, too, do individuals differ in their levels of education, work skills, and their vitality—the internal and external resources that affect their adaptability and ability to respond to change.

III POPULATION CHARACTERISTICS

Communities are different, and may be differentiated in terms of their population characteristics.

For example:

Is the existing labor force sufficient or will immigrants be imported into the host community to fill key (better paying, higher status) jobs?

What is the age distribution of the host population?

What is the sex distribution of the host population? Dependency ratio(s)? Family composition(s)?

What is the ethnic composition of the host community?

How will these population characteristics of the host community(ies) be affected by the resource development?

Age, sex, ethnicity, and family characteristics of individuals also differ and will mediate, either attenuating or accentuating, the impact of a resource development upon specific individuals.

IMPLICATIONS FOR RESEARCH

We are looking at a variety of diverse situations, and contextual parameters heighten or diminish the impact of a resource development.

It is evident that some developments, in some communities, will have negative psycho-social impacts and those impacts will be evident and visible.

In other situations the psycho-social impacts may be more hidden, more easily missed, but none the less, persuasive and negative.

The contextual parameters surrounding a resource development dictate where we should look to find positive and negative impacts.

For example in a low-skill extraction resource development taking place near a small, existing, relatively poor, isolated community with a large existing native population involved in a more traditional economy, episodic unskilled labor requirements may be supplied by the native population and the more skilled labor imported from outside. One might reasonably expect very visible social problems, racial conflict, economic stratification, resentment, crime, and family breakdown.

Research in such a situation could make use of statistics gathered by various social and government agencies, but to get a good picture of what is going on, one would need interpreters and access to the local native and the imported communities.

In such a situation the impact of commodity cycles and industry closure would have a devastating impact upon the community.

However, another type of development, the work camp with a rotational compressed work schedule, is obviously a much different situation. The impact of the resource development may be much more diffused, more individualized. Workers may be recruited from several communities. The negative impact of resource development may be focused on:

- *Individual Workers*—reactions to a compressed work schedule, living conditions in the campsite, hazardousness of the job.

- What is their reaction to the extended time off? Can they make constructive use of such time?

- *Upon the Spouses*—extended periods without a major source of support—detrimental to women with small children at home—alternative arrangements that have to be made to cope with the demands of family life.

- *Upon the Family*—what are the effects on children—does the absence of a major role model for a prolonged period of time have effects on the development of a child?

To analyze the impact of a resource development in such a situation needs different methods and strategies than in the previous case.

The effects of commodity cycles and industry closure may be more diluted and less readily apparent.

It must be emphasized that the contextual parameters of the resource development itself and its host community(ies) and individuals shape the nature, intensity and scope of the impact of that development, which should also influence the choices for research priorities, the foci of research efforts, the types of instrumentation and data collection procedure to be used. The same considerations apply to any generalizations made about resource developments and any particular findings.

Since work and employment generally have positive effects on physical and psychological well-being, we should seek to minimize the negative effects and maximize the positive effects of employment for the individual workers, the family and the community, points which should be considered in formulating policy.

RÉSUMÉ

L'auteur expose les multiples paramètres de l'expérience de la mise en valeur des richesses naturelles afin de fournir un cadre théorique pour l'étude de ces systèmes complexes d'interaction. Il analyse les concepts de l'impact et de l'évaluation de l'impact du point de vue des personnes, des communautés et des projets de mise en valeur. Il présente enfin trois principales dimensions de la mise en valeur des richesses naturelles: le modèle de développement, le contexte culturel et social et les caractéristiques démographiques.

REFERENCES

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