

PLANNING FOR THE IMPACTS OF MEGAPROJECTS

Two North American Examples

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Abstract Recent large-scale oil and mining developments in North America have been planned to achieve positive social impacts on rural communities. We review some general issues of social-impacts planning through the resource-development cycle. Such planning is illustrated by two recent examples of successful megaprojects — Red Dog Mine in Alaska, and Hibernia oilfield off Newfoundland.

Keywords: Resource development, social impacts, planning, Red Dog, Hibernia, Alaska, Newfoundland, oil, mining

1. INTRODUCTION

Northern mining and energy development has often proceeded without much consideration for its impacts on Northern society. The result has been a history of unfortunate examples, where developments boomed and consumed the resource, then went bust, leaving local residents and their environment worse off than before. Promised benefits to local people proved fleeting, for many of the same reasons documented about more southerly natural-resource dependent communities [1, 2, 3, 4, 5, 6]. In Arctic and subarctic regions, however, social damage can be even more severe. Isolated settlements in harsh landscapes have fewer economic alternatives, but often find their traditional livelihoods overwhelmed and disrupted by industrial intrusions.

Through past failures, we are growing wiser. Planning for large-scale North American resource development projects has, in recent decades, increasingly

taken social impacts into account. In the best cases, northern residents have been partners in planning the development, and social scientists were consulted for their insights. Although generally well-intentioned, social-impact planning has not achieved perfect success. Social responses to the rapid, multifaceted changes that occur when a megaproject joins a landscape of villages prove tricky to predict. Cultures interact, and individuals adapt, in varied and dynamic ways, sometimes successfully, sometimes not. The complications encountered — unplanned outcomes amidst a planned development process — provide practical clues for making the next project better. These recent experiences hold greater interest today, and have more to teach us, than the social disasters of earlier unplanned development.

In this paper we begin with some general observations about planning and the resource-development cycle, briefly illustrated with North American examples. Next, we describe two megaprojects developed in the 1990s — the Red Dog zinc mine in Alaska and the Hibernia oilfield off Newfoundland. Each faced unique challenges, and both are notable for the extent and success of their social-impacts planning. Unexpected complexities nevertheless emerged as development unfolded.

2. PLANNING AND THE RESOURCE-DEVELOPMENT CYCLE

Resource development involves five general phases: exploration/discovery, regulatory approval, development, operations and closure. The process of determining the potential and actual outcomes for each of these varies considerably from one site to the next. As a result, we know far less than we should about how to promote sustainable development in the North. This section reviews some of the issues that arise in each phase.

2.1 EXPLORATION AND DISCOVERY

Exploration activity often follows its own pattern of boom and bust. Examples include Beaufort Sea oil exploration in Canada's Arctic, which boomed during the 1970s fuelled by government incentives, and mineral exploration in Labrador in 1995 following discoveries at Voisey's Bay. In some instances the exploration/discovery phase disrupted traditional activities