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From unjust uneconomic growth to sustainable fisheries in Newfoundland: The true costs of closing the inshore fishery for groundfish

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ABSTRACT

Neoliberal economic and social policies during the last 65 years have placed a premium on continuous economic growth. Concern among ecological economists and other critics that economic growth results in loss of natural capital and ecosystem services led to introduction of the concept of "uneconomic growth," defined as "growth of the macro economy that costs us more than it is worth" (Daly and Farley, Ecological economics principles and applications. Washington: Island Press; 2004). This paper proposes the concept of "unjust uneconomic growth" to pinpoint the additional costs of policies that promote uneconomic growth to the neglect of other considerations and uses the case of Newfoundland and Labrador fisheries policies since 1992 to document it. Newfoundland and Labrador fisheries experienced uneconomic growth in the 1980s leading to the collapse of ground fish stocks. The policies enacted since 1993 based on economic growth goals have failed to solve the ecological-social crisis and entailed additional costs to small-scale fisheries.

1. Introduction

Fisheries can be many things to many people, depending on the ecological, economic or social context. For coastal peoples, fisheries are sources of wealth, food security, jobs and identity. In some developing countries fisheries are viewed as a renewable commons regulated by adjacent fishing communities which benefit from the scarcity rent or unearned profit from using goods produced by nature. In contrast, the majority of fisheries in developed countries are industries organized to exploit commoditized renewable resources and are aimed only at maximizing profits. The renewable resources these industries exploit are common pool resources which are underpinned by complex social ecological systems. The operations of these industries are often marred by ecological uncertainties that render any efficient economic exploitation suspect. Many people argued that the short-term profitability of fisheries draws too many people into the industry, resulting in deleterious effects on both fish stocks (through over-exploitation) and fishers (through dissipation of the scarcity rent). This argument, however, draws attention away from the radically different impact of different fishing technologies. Nonetheless, these conclusions provided the biological and economic justification for establishing fisheries management practices in the 1950s.

The preferred theoretical model that has informed fisheries management in the post-War period is the Gordon–Schaefer bio-economic model [2,3]. The model grafted neoclassical economics principles onto a single species biological growth curve that identified the maximum sustainable yield (MSY) as the stock size that yields maximum stock growth and the static efficient sustainable yield as the catch level that, if maintained perpetually, would produce the largest annual net benefit from the use of the resource. The model aims to prevent the presumed "tragedy of open access regimes" [1:171] by assigning property rights, either as "private property or as public (government) property, in either case subject to a unified directing power" [2:135]. Renewed awareness of the complexity of fisheries combined with the establishment of the EEZ [4] has given legitimacy to consistent efforts by governments to manage their national commercial fisheries.

Fisheries policies in Canada are stated to be focused on "long-term ecological sustainability, economic prosperity and improved governance" [5]. The "improved governance" goal is a constant process of "modernization", under a complex mix of federal and provincial policies, that employ a diverse fishing rights system, including licences, catch quotas, individual quotas (IQs) or individual transferable quotas (ITQs). The enforcement of fisheries policies focused mainly on

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ecological sustainability and economic prosperity has had serious consequences for the social sustainability of coastal communities. This is most evident in the Newfoundland fishery, which continues to struggle with the consequences of the "adjustment process" that was initiated after the collapse of the Northern cod stock at the beginning of 1990s. The Task Force on Incomes and Adjustment, chaired by Richard Cashin, head of the Fishermen, Food and Allied Workers Union, established in 1992, had as its main goals "to create an Atlantic ground fish fishery that is ecologically and commercially sustainable" and to "reduce overcapacity" while addressing the "immediate needs of fishermen and plant workers, especially the need for income assistance" [6]. About 27,000 fishers and processing plant workers lost their jobs, 40% of the 240 processing plants were closed, most of them processing ground fish caught inshore. Government expenditures devoted to coping with the collapse reached an estimated $180 million in fiscal year 1992–1993, with $95 million accounting for unemployment insurance (UI) benefits in the fishery [6]. A 2005 study on the Newfoundland fishery, based on data collected 10 years after the cod stock's collapse, showed that the perverse incentive effects of the fisheries unemployment insurance program have kept the fishermen from leaving, but the inshore harvesting sector of Newfoundland continues to be a commercially non-viable entity, dependent upon government transfers for survival [7]. The costs of inadequate NL fisheries management policies have started to be counted [8–11].

This paper proposes that the original goals of the 1992 Task Force to establish a "long-term ecologically sustainable, economically prosperous and well governed" fishery were not realized and, in fact, the "adjustment process" has eroded the very backbone of the Newfoundland fishery. The policies put in place to establish the future fishery have produced long-term institutional and social costs in the form of excessive government spending, loss of physical assets and deterioration of cultural and traditional values. These costs must be acknowledged as a first step in proposing a new approach to fisheries policy development aimed at establishing a sustainable fishery. The objectives of this study are to:

a. Develop a theoretical inquiry to identify and better understand the causes of this policy failure;
b. Develop an inventory of the costs born of the inadequate management of the Newfoundland fisheries after the collapse of groundfish stocks.

2. Theoretical inquiry

The theoretical framework provided by neoclassical economics informs neoliberalism, which promises to deliver widespread prosperity supported by continuous economic growth, defined as increase in the gross domestic product (GDP). Both the free market and the government are assumed to play a role in the functioning of the neoliberal economy. Neoliberalism views the market as an autonomous self-regulating system [12] which is able, when property rights are properly defined and competition is assured [13], to solve the problem of efficient allocation of resources for both producers and consumers. The efficient allocation of resources is called a Pareto optimum, a situation in which no other allocation would make at least one person better off without making anyone else worse off. This spontaneous harmonization of the resources allocation (goods produced for sale) with the needs (goods bought for consumption) happens through the workings of the price system. It is assumed that "the benefit of an incremental unit of a good or service to a (competitive) demander is measured by his demand price and that the opportunity cost of an incremental unit of a good or service to a (competitive) supplier is measured by his supply price" [14]. When the supply price equals the demand price, resources are allocated Pareto efficiently and the net benefit of market activity is maximized. Graphically the Pareto efficiency can be illustrated by a Production Possibilities Frontier (PPF), where points E, D, and F on the frontier are Pareto optimal (Fig. 1). Based as it is on prices, the Pareto optimum underlies a value-free theory of choice as regards both individual and social well-being. "More specifically, an efficient allocation is one that best satisfies individual wants *weighted by the individual's ability to pay*—that is by her income and wealth" [1:301] and not by the justness of the outcome. As individual wants are theoretically infinite, the Pareto optimum assumes that both the goal of consumers (utility maximization) and the goal of producers (profit maximization) are legitimate and desirable, as they both enlarge GDP. The Pareto analysis assumes a given distribution of income among people as illustrated by the Kaldor–Hicks compensation test [15]: a social policy is potentially Pareto optimal/efficient when it maximizes the total net social benefits (welfare) compared to the status quo and other policy options, and thus the potential exists for achieving the greatest good for the greatest number of people, as those made better-off will compensate those who are worse-off.

The welfare maximizing theory is the basis of all Western societies' income redistribution policies: the government charges taxes and redistributes income to the less well-off in a society. The implicit assumption of both Pareto allocative efficiency theory and of the Kaldor–Hicks efficiency criterion is that the size of the "social pie" should be continuously increasing. This assumption has become the cornerstone of neoliberal policies since the 1940s due to two theoretical neoclassical economics contributions. One is Keynes' theory of aggregate demand [16] developed as a solution to the challenges of the Great Depression of the early 1930s. Keynes saw consumption as the main driver of prosperity. In the event that consumers failed to spend, Keynes believed that the government should step in and "serve as a kind of financial carburetor to keep a rich mixture of spending power going into the engine, through deficits if necessary" [17:4]. The second contribution was the introduction of estimates of national income and product accounts (NIPAs) to serve as main feedback loops to national policy. The first gross national product (GNP), a precursor of the GDP, was calculated for USA in 1942 to help with the war time planning [18]. How and why a war-time planning instrument, which only measures quantitative market activity, has been kept in place as a measure of economic prosperity that still informs economic policies in the majority of nations is a mystery. GDP only measures (good and bad) transactions involving money and excludes functions and activities that make life meaningful, such as parenting, or time spent with the family or volunteering in the community. GDP also ignores the destruction of the natural habitat upon which the economy and life itself depend, by keeping

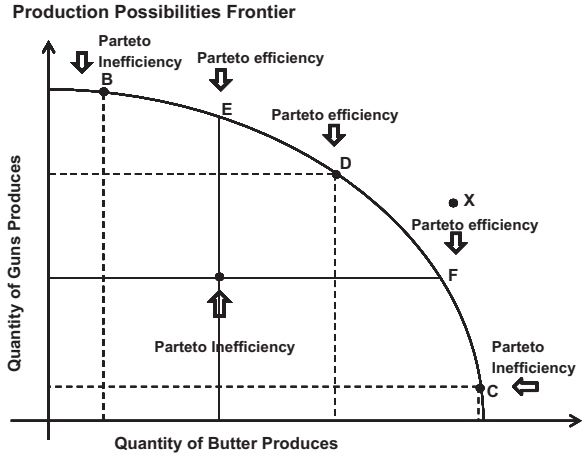

Fig. 1. Production Possibilities Frontier. *Source*: Internet (commons.wikimedia.org).

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