MID-TERM ASSIGNMENT IN POLITICAL SCIENCE

Collective Action Problems

International Business and Politics

Date of submission: 26 Oct. 2023
Number of Characters: 11,374
Number of Pages: 7
Submitted by: [redacted]
Reference system: APA

The purpose of this paper is to answer the following question:

In what ways can governments contribute to resolving collective action problems?

It will do so by firstly, examining the concept of collective action introduced by Mancur Olson and examples of collective action problems. Secondly, it will look at different measures that governments can utilize in engagement towards collective action on both a national level by examining overfishing in Japan, and on an intergovernmental level by examining the North Atlantic Treaty Organization. Thirdly, it will bring forward a conclusion which aims to answer the question stated above.

1. Introduction

1.1 Understanding Collective Action problems

"Collective action arises when the efforts of two or more individuals or agents (e.g., countries) are required to accomplish an outcome" (Sandler, 2015, p.196). The outcome could for instance be resolving issues concerning clean energy transition, overfishing or vaccinations aimed at creating herd immunity.

Since these issues can have negative effects for the whole of society, it becomes a collective problem. Therefore, it's in the collective's interest to resolve them. However, Mancur Olson argued in *The Logic of Collective Action* (1974), that individual's rationality is not sufficient to achieve collective rationality (Sandler, 1992, p.3). This means that individual agents may pursue self-interested goals that conflicts with or are counterproductive to the goals of the collective. This in turn creates what we call collective action problems. Olson's work is deeply rooted in Rational Choice Theory, which assumes that individuals make decision based on rational self-interest. He applies this theory to explain why individuals may choose to free ride by not to participating in collective action if they believe they can benefit without contributing.

A key concept of collective action is the notion of *the provision of public goods*, which can be either excludable and rivalrous like private goods (e.g., cars or apartments) or non-excludable and non-rivalrous like public goods (e.g., national defence or air). Olson argues that if goods are non-excludable, such as fish in the sea, individuals will be incentivized to overfish to maximize their utility. As individuals act in their own self-interest, they deplete the stocks putting themselves in the "tragedy of the commons" (Hardin, 1969, p. 1243-1248).

1.2 Collective Action and Cooperation

To successfully resolve collective action problems individual agents, need to cooperate with each other in changing their current practices. Olson argues that *selective incentives* can induce individuals to engage in collective actions through rewards, recognition, punishment, or enforcement. (Heckelman, 2019, p. 475).

Lastly, Olson argues that small, homogenous groups are more effective in enforcing desired collective behaviours. In contrast, he argues that larger or heterogeneous groups face difficulties in cooperating and organizing, making it more likely that smaller groups with shared interest will form. (Heckelman, 2019, p. 470).

2. Applications

We shall now examine how governments through policy and institutions help resolve collective action problems.

2.1 Controlling behaviour through monitorization

The Japanese government has sought to induce more sustainable fishing habits due to overfishing. The Japanese fisheries are among some of the biggest in the world (FAO Yearbook, 2018) and in 2017 half of their 37 stocks were overfished (ICES, 2017, pp.1277-1287). To make sure that the practices carried out by fisheries were sustainable and mitigate depleting the stocks, the government decided to increase its oversight of fishery management plans in 2018 (Hakala et al, 2023).

Since the Japanese fisheries can be considered a homogenous group, this would from a collective action perspective make the monitoring of the group less difficult than it would with a heterogenous group. However, since the Japanese fisheries are among the largest in the world this would be considered somewhat difficult. Yet, scholars have suggested that recent advancements in technology have challenged the assumptions made by Olson in 1971 by decreasing the complexity of oversight in large groups (Lupia & Gisela. 2003, p. 315). An example of this, is the introduction of fleet wide electronic monitoring systems that counts incidental catch of Atlantic bluefin tuna in the U.S. The systems aim to improve estimates of domestic bluefin tuna catch and result in more effective fishery management (NOAA, 2015). To enable systems like this, the government could introduce subsidies that would incentivize Japanese fisheries to install monitoring systems on their vessels. Even so, the UN argues that this type of systems generally has been largely insufficient, meaning that the data is not effective at tracing fish catches and managing fish stocks (UN/CEFACT, 2017). To counter this, the UN launched the Fisheries Language for Universal Exchange (FLUX) standard, which aims to provide a harmonized standard for fish stock management.

The introduction of FLUX also aims to increase oversight of illegal, unregulated, and unreported (IUU) fishing, since the extent of the magnitude is difficult to assess (World Bank, 2017 p.20). Research suggests that, by increasing monetarization for the purpose of prevention of IUU, marine ecosystems would flourish as shown by the PESCAO programme in West Africa (UN, 2020). This could be a relevant point for the Japanese government, since research from OECD suggest that policies aimed at reducing operating costs of

fisheries leads to further overfishing (OECD, 2018, p. 6). Therefore, as a means of enforcing behaviour, the government could decrease subsidies to operating costs for fisheries that haven't installed monitoring systems, which in turn could create better fishery management.

2.2 Explaining the benefits

A report from the World Bank argued that less fishing would create larger fish stocks and because of overfishing, the world foregoes net profits of $83 billion each year (World Bank, 2017 p.36). In other words, there is a potential for an increase in long-term profits if individuals lessen their short-term fishery activities. Nevertheless, collective action theorist would suggest that rational individuals would seek to maximize their own utility of the available fish by depleting the commons since the good is non-excludable, even though this works against the collectives' best interests. Similarly, some individuals might use the collective action of other fisheries to increase their profits by catching fish that would otherwise have been left in the ocean.

However, since the research from the World Bank suggests that there is a potential benefit to reducing fishery activities, an argument could be made for the utilization of information campaigns aimed at educating individuals on the consequences of overfishing and the benefits of reducing activities. It's relevant to note here that such campaigns exist manyfold. Olson's work primarily looks at government intervention as a solution to collective action problems, but critics have suggested that Non-Governmental Organizations (NGOs) in the form of social movements or voluntary organization play a crucial role in solving collective action problems (Barnes & Laerhoven, 2015.) NGOs such as Greenpeace (2021) or WWF (WWF, 2015, pp.24-31) publish campaigns that aim to incentivize sustainable fishing practices.

In summary, to solve their collective action problems the Japanese government can utilize monitoring, information campaigns and international agreements on standards such as FLUX.

We will now move on to examining how an intergovernmental organization can overcome collective action problems.

2.3 Incentivizing cooperation and discouraging free riding

The North Atlantic Treaty Organization (NATO) is an intergovernmental organization wherein member states have agreed to collectively provide the public good of security to their citizens by working together on defending the countries within the organization (NATO, 1949). The provision of protection is a non-excludable and non-rivalrous good, therefore, collective action theory would suggest that individual agents

would have an incentive to free ride on the contributions of others. In the case of NATO, this has shown to be true to some extent.

The member states agreed in 2006 to commit a minimum of 2% of their GDP to ensure NATO's military readiness (NATO, 2013). However, the bulk of the member states have failed to uphold their commitment leading to free riding issues (NATO, 2023, p.2). Collective action theory explains this behaviour due to the size and heterogenous nature of the organization since NATO member states differ in economic wealth, power, and self-interests. However, it is worth noting that an individual countries contribution is not only measured in defence expenditure, but contributions such as a key strategic location like Iceland that don't have a military also count (Tuschhoff, 2023, p.192). Nevertheless, in *The Research Handbook on NATO* (2023) Christian Tuschhoff states that the consequences of this free riding behaviour can create a perceived weakness of individual member states (Tuschhoff, 2023, p.195).

To counter this collective action problem, NATO imposed two measures. Firstly, they institutionalized the principle of *indivisible security*. The principle states that all members of the organization share the "same kind and degree of protection against an attack provided for by the collective defence" (Tuschhoff, 2023, p.196). Secondly, to discourage free riding and incentivize member states to contribute, NATO introduced the so-called "layer cake" of troops which sought to deploy different national force contingents ("layers") next one another across nations (Tuschhoff, 2023, p.196). This meant that if an adversary were to attack one member state, they would effectively be attacking several if not all the member states triggering the need for collective action. An example of this is The Baltic Air Policing Mission (NATO, 2023).

It could be argued that NATO stands as a historical counterexample to Olsons theory as a large group that has managed to overcome the free riding issues to some extent. NATO was founded in part on shared values of freedom and democracy (NATO, 1949) and since collective action theory's focus on rational self-interest doesn't account for factors such as norms and values and the role of social capital in fostering cooperation, it lacks the ability to describe why such groups persist.

In summary, by institutionalising the principle of "indivisible security" and the introduction of the "layer cake", NATO fended of potential adversaries from singling out one nation while at the same time resolving their issues of free riding and lack of contribution.

3. Conclusion

In the interest of answering the question stated in the beginning of this paper its concluded that: Governments can help resolving collective action problems by introducing regulations and monitorization, information campaigns, subsidising or through cooperation on international standards. Furthermore, by

institutionalizing principles and spreading the costs associated with the provision of the goods and collective risk sharing, governments can encourage cooperation and diminish free riding.

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