Assessing the Formulation and Implementation of the Closed Fishing Season Policy for Sardines in Zamboanga Peninsula, Philippines

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The Closed Fishing Season Policy is a fishing regulation adopted by the national agency and local stakeholders to conserve the sardines species and sustain the operations of the industry in Zamboanga Peninsula. Fisheries regulation in the Philippines, particularly the formulation and implementation of closed fishing season, is a little explored area. Premised on this, the study assessed the creating subsequent enforcement of Joint DA-DILG Administrative Order No. 1 Series of 2011. Employing a case study design, the article illustrates the interaction among the stakeholders and elucidates the issues as well as the constraining and facilitating factors in the formulation and implementation of the fishing regulation. In formulation, the study contends that the conservation policy was facilitated by precursor circumstances and practices (such as the decline of the tuna industry, the fishing closure in the Visayan Sea, the three-day fishing ban, and the “self-regulation” measures) while the main issue was the starting period of the three-month fishing closure. In implementation, it contends that the fishing regulation suffered from poor dissemination, insufficient safety nets, cooperation problems, industry unpreparedness, and lack of evaluative studies. The favourable factors include the availability of resources, support from stakeholders, few violations, employment of strategic alternatives, and improvement in provision of safety nets. Overall, the three-year closed season was deemed favourably as the stakeholders acknowledge the problem and recognize the appropriateness of the measure.

Key words: Closed Fishing Season, fisheries regulation, Philippines, policy making, sardines, Zamboanga Peninsula

INTRODUCTION

Zamboanga Peninsula is the capital of sardines production in the Philippines. The region consistently yields the highest volume of sardines contributing about 70% of the country’s total production in the last decade. Its two constituent cities — Zamboanga City and Dipolog City — are widely known as the heartland of the canning sardines industry and the bottled sardines industry, respectively. The trend of sardines production in Zamboanga Peninsula has been increasing over the years; even posting considerable increase of 94,000 metric tons in 2008-2009. However, this trajectory was interrupted in 2010-2011 when the region’s sardines production registered a substantial decrease of 91,000 metric tons (Philippine Statistics Authority 2015; Bureau of Agricultural Statistics 2014).
The unexpected drop has raised doubt on the sustainability of the sardines’ supply, which alarmed the entire sardines industry as well as its main administrative agency — Bureau of Fisheries and Aquatic Resources (BFAR). Earlier data from the National Stock Assessment Program also revealed that exploitation of sardines was at 60-70%, thus endangering the sustainability of the fish stock. There were also reports of catching of juvenile and gravid sardines. These concerns have prompted the sardines stakeholders to seriously evaluate the conservation of the fishery resource in Zamboanga Peninsula.

Responding to the ominous prospect, the Joint Department of Agriculture-Department of the Interior and Local Government (DA-DILG) Administrative Order No. 1 series of 2011 (JAO-01 s.2011) or the so-called Closed Fishing Season Policy for Sardines in Zamboanga Peninsula was promulgated. Signed as a fisheries regulation on 23 Aug 2011, the Closed Fishing Season Policy establishes a non-fishing zone for commercial-scale harvest of sardines to be enforced for three months per year for a period of three years starting December 2011. The closed fishing area covers an area of 13,987 sq. km comprising portions of East Sulu Sea, Basilan Strait and Sibuguey Bay, and encompassing the western municipal/national waters of Zamboanga Del Norte, the waters bordering south and eastern waters of Zamboanga City and southern part of Zamboanga Sibugay (see Figures 1 and 2). The effectivity of the fisheries regulation officially ended in March 2014, but was promptly supplanted by BFAR Administrative Order Circular No. 255 Series of 2014 (BAC No. 255 s. 2014) which not only extended the closed season but expanded the area coverage to Sulu and Tawi-Tawi.

The Closed Fishing Season Policy for Sardines in Zamboanga Peninsula is a fisheries management approach designed to arrest the decline of fish catch and sustain the operations of the industry by protecting the species during spawning season. Broadly, fisheries management is an
integrated process of crafting policies and regulations which govern fishing activities to ensure the continued productivity of fishery resources (FAO 1997). It encompasses the whole enterprise of making fishing-related policies and regulations such as agenda setting, information gathering, consultation, decision-making, resources allocation, formulation, implementation and evaluation. Policy/regulation making is not a straightforward process, as it is susceptible to competing interests and factors/circumstances on the ground (see Brillo 2010a; Brillo 2010b; Brillo 2014). Although the intricacies of policy making are well accepted, empirical case studies that specifically delineate the dynamics and shaping factors are wanting. This issue is acute in fishing management in the Philippines, especially in closed fishing season where extant scholarly works are meagre; a lamentable situation considering the country is archipelagic with a lot of major fishing grounds of which many are considered ecologically vulnerable. The few existing studies on closed fishing season regulation have underscored a number of variables; for instance: conflicts among stakeholders increase the costs of information and policy (Fernandez 2006; Ahmed et al. 2006); class, ethnic, and gender differences influence the benefits and costs of coastal resource management programs (Eder 2005); capacity of government institutions, culture of fisheries governance, and practices/sentiments of the locals shape the implementation of regulations (Fabinyi 2009; Fabinyi & Dalabajan 2011); and stakeholders’ participation/consultation essentiality in selecting policy options (Pomeroy et al. 2008). Building on these works and addressing the literature gap, the study assessed the making and subsequent enforcement of the Closed Fishing Season Policy from 2011 to 2014 in Zamboanga Peninsula. In particular, the article looked into the interaction among the stakeholders and elucidates the issues as well as the constraining and facilitating factors in the formulation and implementation of Joint DA-DILG Administrative Order No. 1 Series of 2011. On the whole, the study intended to better understand the dynamics in making fisheries regulation in the country by supplying information on the intricacies of the Closed Fishing Season Policy for sardines.
MATERIALS AND METHODS

The study employed a case study design in examining the formulation and implementation of the Closed Fishing Season Policy for sardines in Zamboanga Peninsula. The authors generated data from interviews, focus group discussions, documents, reports and other secondary sources, and analyzed them using content analysis approach. The interviewees were selected from the stakeholders of the policy, particularly the key participants in the making and implementing of Joint DA-DILG Administrative Order No. 1 Series of 2011. The interviewees include key actors from the sardines industry (i.e., canning and bottling companies and commercial fishing operators), national, regional and provincial offices of BFAR, Fisheries and Aquatic Resources Management Council (FARMC) and local government units (LGUs) of Zamboanga City and Zamboanga Del Norte, Philippine Fisheries and Development Authority (PFDA), Philippine Coast Guard (PCG), Philippine Industrial and Integrated Labor Union (PHILU), Department of Labor and Employment (DOLE), Zamboanga State College of Marine Sciences and Technology (ZSCMST) of Zamboanga City, DILG, Department of Trade and Industry (DTI), Department of Social Welfare and Development (DSWD), and In-glass Sardine Association (ISDA) of Zamboanga Del Norte.

The results of the study are outlined as follows: (1) the agenda setting and the formulation of the Closed Fishing Season Policy; (2) the stakeholders and the issues constraining the implementation of the policy; (3) the factors facilitating implementation of the policy; and (4) the conclusion.

RESULTS AND DISCUSSION

Agenda Setting and Formulation: The Closed Fishing Season Policy

The severe decline in sardines harvest from 207,322.99 in 2010 to 116,362.89 metric tons in 2011 (Philippine Statistics Authority 2015; Bureau of Agricultural Statistics 2014) precipitated the imposition of a fishing ban in Zamboanga Peninsula. Major industry players, particularly the canning industry being the largest processor of sardines in the country, were concerned about the viability of sustaining the fishery resource. Their anxiety was exacerbated by the widely known decline of tuna supply in Zamboanga Peninsula decades ago which eventually led to the decline of its tuna industry (Zatragoza et al. 2004; Vera & Hipolito 2006; Espejo 2012; Delgado 2013). The situation has prompted the sardines stakeholders to seriously ponder how to conserve the sardines stock in Zamboanga Peninsula and ensure the sustainability of their industry.

The sardines fishing ban in Zamboanga Peninsula was the conservation measure espoused by the sardines sector. A fishing ban is a widely accepted regulatory measure to promote the preservation of a species by limiting fishing and protecting the species during their spawning season (see Sadovy et al. 2005; Arendse et al. 2007; Hargraves 2011; Cohen et al. 2013; Chimba & Musuka 2014). It also aims to ensure the sustainability of the fisherfolk’s livelihood as well as the fishing industry (World Fish Centre 2005; Chunga & Phiri 2008; Lungu & Häskens 2010; Churchill 2010; Barley et al. 2014). A closed season on fisheries and aquatic resources is also a well recognised management-conservation regulation in the Philippine Fisheries Code of 1998 (Republic Act 8550, Section 9). BFAR has implemented this type of conservation measure in the Visayan Sea and adjoining waters covering commercial fishing for sardines, mackerels, and herrings via Fisheries Administrative Order (FAO) No. 167 since 1989.

Sardines stakeholders already discussed among each other the closed fishing season even before the sardines’ catch decline in 2011. For instance, the idea of having a few months fishing ban during the sardines spawning period in Northern Zamboanga Peninsula has been floated by the leaders of the bottled sardines companies, specifically ISDA, and BFAR of Zamboanga Del Norte early on.

Moreover, some Municipalities in Zamboanga Del Norte (e.g., Sindangan, Leon B. Postigo, Jose Dalman, Salug and Manukan) have already been enforcing a monthly three-day fishing ban for all fish species in their municipal waters, following the lunar phase of every new moon. For those in the canning sardines industry, some processors and commercial fishing companies in Zamboanga City have been practicing “self-regulation” of deferring fishing from November to March due to low fish catch.

The serious push for a Closed Fishing Season Policy for sardines in Zamboanga Peninsula only came after the 2010-2011 acute decline in the volume of sardines’ catch. Stakeholders, particularly the canning sardines industry and BFAR Region 9, took the initiative to instigate a fishing ban in their area. As the largest player in the sardines sector, the canning sardines industry stands to lose the most if the supply of sardines dwindle. As the main government agency for the management and conservation of fishery resources, BFAR has to take action to salvage the multibillion sardines industry in Zamboanga Peninsula.

The results of the BFAR National Stock Assessment Program (NSAP) in Region 9 covering the period from May 2006 to June 2008 served as the principal basis for justifying the closed fishing season policy proposal. The NSAP validated the proposition that the catch volume of
sardines in Zamboanga Peninsula was in decline. Adopting the findings, an Administrative Order was drafted by BFAR proposing to establish a closed season for the conservation of sardines in East Sulu Sea, Basilan Strait and Sibuguey Bay from November 1 to February 1. The proposal was submitted to NFARMC — the highest policy-recommending body on fisheries and aquatic resources — which then endorsed the Administrative Order.

However, when the proposal was presented to the fishing, the canning and the bottled sardines industries on 26 Aug 2011, objections were raised, particularly on the duration of the fishing ban. During the meeting, the sardines industries formally proposed for public consultations and a review of the scientific studies on sardines (BFAR 2011b). Accordingly, a month before the proposed November 1 recommended commencement of the closed season, BFAR arranged a meeting for the Scientific Review of Studies on Sardines on 3-6 October 2011. In the meeting a number of scientific studies were presented, including the Gonadal Studies which focused on the fecundity or spawning productiveness of sardines. In general, the findings of the studies reinforced that the major spawning period of sardines in Zamboanga Peninsula is from November to February. A consensus was also reached at the meeting to conduct comprehensive scientific studies from November 2011 to March 2012 to further validate the November to February spawning period (BFAR 2011b). Consequently, the NSAP and the Gonadal Studies provided the scientific rationalisation for the closed fishing season on sardines and for the three-month duration of the fishing ban.

One strategic move taken by BFAR in formulating the Closed Fishing Season Policy was to involve the Department of Interior and Local Government (DILG). Since the fishing closure directly impacts all the fishing municipalities in Zamboanga Peninsula, particularly the workers and fishermen of the sardines industry, the LGUs were expectedly reluctant about the regulation. For instance, the proposal to include the municipal waters on the coverage of the fishing closure was initially rebuffed by the LGUs. The involvement of DILG made the fishing ban a joint venture between the Department of Agriculture (DA) represented by BFAR and the LGUs which obligated the latter to also take responsibility, particularly over their municipal waters.

The main issue in the formulation of the 3-month Closed Fishing Season Policy is its implementation period, that is whether to start on November 1 or December 1. November 1 to February 1, being the peak spawning season of sardines based on the NSAP and Gonadal Studies, was proposed and approved by the NFARMC. December 1 to March 1 was preferred by the sardines industry, particularly the canning sardines processors and the commercial fishing operators, for economic reasons. Traditionally, canning sardines and commercial fishing operations in December are minimal due to low levels of fish catch, unlike in November when catch is bountiful both in sardines size and quantity. This implies that starting the fishing ban in November would mean more losses for them in terms of production and cost, such as providing one-month “livelihood” pay for the workers in the canneries and fishing vessels that would be affected by the stoppage of work. Thus, moving the closed fishing season in December means making it coincide with the month of off-peak operations in fishing and canning sardines. In addition, resuming operations in February is also less enticing to the canning sardines processors and commercial fishing operators since sardines at this time are generally undersized and scarce. Furthermore, the sardines industry’s position was reinforced when the Technical Working Group (TWG), composed of the various stakeholders of the industry, and the LGUs supported it and requested BFAR to move the ban to December 2011 to March 2012. The ban in the succeeding years (i.e., 2012 and 2013) will depend on the result of the scientific studies to be conducted after each closed season. Under this context, BFAR made the concession and commenced the fishing closure in December 2011.

Constraining Issues in the Implementation of the Closed Fishing Season Policy

The key stakeholders involved in the making and implementation of the Closed Fishing Season Policy for sardines in Zamboanga Peninsula are: (1) the players of sardines industry— the canning sardines companies, the bottled sardines companies and the commercial fishing operators, (2) BFAR, (3) NFARMC, and (4) the LGUs. The sardines sector in Zamboanga Peninsula is a PhP3-billion industry employing about 35,000 workers which includes: 12 canning factories, 25 active bottled sardines processors, ten establishments in the allied industries, four tin can manufacturers, four industry associations, 20 commercial fishing operators, 2,046 licensed municipal fishermen, and 588 licensed vessels (DTI-9 2013; DTI 2014). The four industry associations are: ISDA, Zamboanga City Canners Association (ZCCA), Industrial Group of Zamboanga Inc. (IGZI), and Southern Philippines Association of Deep Sea Fishing (SOPHIL). Furthermore, the two key multi-sectoral groups organised in line with the implementation of the Closed Fishing Season Policy are: the TWG which reviews the implementation of the fishing regulation; and the Industry Tripartite Council (ITC) which represents the displaced fishermen and their families as well as the private fishing and canning companies. ITC also serves as a mechanism to engage the government agencies on matters affecting the industry in the aftermath of the fishing closure.

Although BFAR conducted consultation meetings months before the implementation of the Closed Fishing Season
Policy, the lack of involvement during the formulation of the regulation was still invoked by some stakeholders. Fisherfolk, workers and some LGUs claimed that they were merely informed after the issuance of the administrative order. Fisherfolk and workers often cited lack of consultations as the reason why the programs launched by BFAR and the other government agencies (e.g., DTI conducted livelihood seminars; BFAR provided training for seaweed farming; DENR organised mangrove planting; and LGU distributed fishing gears— gill net sand hook and lines) to help them get through the three-month fishing ban had little impact. For instance, only two out of 100 participants availed of the mangrove planting livelihood program as many viewed the support as inappropriate. Moreover, the ITC, the main forum in discussing the issues and concerns of the affected fisherfolk and workers, was organised only on 22 Nov 2011, a few days before the December start of the fishing closure. The Sustained Availability through Genuine and Intensified Preservation (SAGIP) Tamban: Alternative Employment Programs, the special program intended to provide alternative employment to displaced workers was organised only on 8 Dec 2011 when closed season was already in effect. The DOLE has cited that the agency’s interventions to help the displaced workers were constrained by the lack of time to prepare for proposals for project funding either by the individual or the industry. Consequently, these delayed actions have contributed to the inadequacy of safety nets for those affected in the initial year of the closed season’s implementation.

On the ground, the dissemination of information was problematic in the first year of implementing the closed fishing season. Although BFAR informed all the affected LGUs, particularly on the rationale behind the policy (i.e., conserving the sardines and arresting the species’ decline), the explanation on the technical aspects as well as the coverage of the administrative order seemed to be inadequate. The situation was exacerbated since many fisherfolk and workers complained that they were informed only when the fishing ban was about to be enforced. The poor and late dissemination of information resulted in misunderstanding, particularly to the local law enforcers and community stakeholders. For instance, during the early implementation of the regulation there was confusion as some LGUs and many fisherfolk wrongly thought that the fishing prohibition does not cover the municipal waters (i.e., within 15 km from the shoreline). As a consequence, fishing in municipal water continued operation during the closed season, thwarting the purpose of the regulation. Also, the prohibition on marketing does not have a clear mechanism, that is determining whether the sardines on sale or in possession were caught in the conservation area or not (see Table 1). LGUs instead imposed ‘market denial,’ banning the selling of sardines in the market, thus discouraging fisherfolk to catch sardines. These circumstances, unfortunately, have resulted in resistance and animosity to the closed season policy.

On the actual execution of the fishing regulation, the commitment of some of the LGUs, particularly on the first year of implementation, became an issue. Some LGUs perceived that the fishing ban is unpopular among their fishermen constituents since it also bans the use of scoop nets (i.e., fine-meshed net) and its duration coincides with “amihan” or northeast monsoon where there is abundance of “lupoy” (juvenile sardines). Lupoy is a major source of income among the local fishing community and is mainly caught using scoop nets. Since the fisherfolk comprise a substantial portion of the electorate, the LGUs thought it would be politically risky to enforce the closed season. Consequently, five out of 18 coastal municipalities in Zamboanga Del Norte did not fully implement the closed fishing season.

Some enforcers have also cited that the main challenge was monitoring the violations in commercial waters and in fish catch landing sites. In the former, the coverage area of

<table>
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<th>Item</th>
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<td>Establishment of conservation area for sardines</td>
<td>Conservation area covers East Sulu Sea, Basilan Strait and Sibuguey Bay</td>
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<td>It encompasses the western municipal/national waters of Zamboanga del Norte, waters bordering south and eastern waters of Zamboanga City, and southern part of Zamboanga Sibugay.</td>
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<tr>
<td>Prohibition on fishing</td>
<td>Ban in catching/killing sardines using commercial purse seine, commercial ring net, commercial bag net, and scoop net in the conservation area</td>
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<tr>
<td>Prohibition on marketing</td>
<td>Ban to purchase, sell, offer or expose for sale display, or have in possessions or control any sardines caught in the conservation area</td>
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<td>Period of closed season</td>
<td>November 1 to February 1 for a period of three years</td>
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<td>Peer review before and after the closed season</td>
<td>Transitory provision: For the first year, closed season covers 1 Dec 2011 to 1 March 2012</td>
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<td>Provided livelihood program</td>
<td>To assess the sardines population in the conservation area</td>
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<td>Provided livelihood program</td>
<td>To evaluate the impact of closed season</td>
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13,987 square kilometres is vast, and in the latter, there are 18 commercial landing sites for sardines in the Zamboanga Peninsula. This problem was acute in Sindangan, the largest municipality, where weak monitoring has been attributed to the lack of cooperation between the LGU and BFAR, and to the lack of manpower, as only one personnel was assigned to oversee its 22 coastal Barangays.

The bottled sardines processing companies were not prepared when the fishing ban was first implemented. They lacked cold storage facilities which would have enabled them to store sardines and continue bottling operations during the fishing. Although there is one cold storage facility existing in Zamboanga Del Norte, it was not utilised since it was not in working condition and located some distance from the site of many processors. In addition, the canning sardines industry also cited the problem in recruiting workers at the end of the closed fishing season. Many of the workers come from other provinces; they go home during the three-month fishing ban and some of them do not return for work at the start of the open fishing season.

Another major constraining factor in the implementation of the closed fishing season was the unavailability of reliable data. The Administrative Order, specifically Section 3, stipulates that a peer review before and after succeeding closed seasons shall be conducted to evaluate the impact of the conservation measure and to determine if it shall be discontinued or extended. Yet, serious efforts to conduct the required evaluation studies to assess the effectiveness of each season fishing closure seem to be wanting. So far, the only research mentioned that is related to the validation of the fishing ban is a one-time study conducted by the research arm of BFAR—the National Fisheries and Resources Development Institute (NFRDI). The need for dependable data was underscored in two instances: one, the discrepancy in data between the Bureau of Agriculture Statistics (BAS) and Philippine Statistics Authority (PSA) which showed a decrease in sardines catch in 2012, and the sardines industry and BFAR which showed an increase in production; and two, the unexpected drop in the volume catch of sardines in 2013 was not fully explained scientifically up to present.

**Factors Facilitating the Implementation of the Closed Fishing Season Policy**

The main enabling factor in the execution of the closed fishing closure was the availability of resources. BFAR has allocated funds, assets and personnel solely for enforcing the fishing ban. In particular, the agency has allotted PhP 27 million per year budget (an amount at the time was generally viewed as sufficient), and has assigned a patrol vessel (i.e., MV DA-BFAR) and staff personnel (from BFAR’s Fisheries Resource Management Division [FRMD]) for the implementation of the closed season policy. BFAR also relied on three Monitoring and Control Surveillance (MCS) vessels from Philippine Coast Guard. The arrangement during a closed season was for the four vessels (i.e., MVDA and the 3 MCS vessels) to patrol the coverage area (usually during night to early morning), and BFAR personnel, the LGUs and the PNP (i.e., the Police Regional Office 9) to monitor the landing sites and the local wet markets. On the ground, Barangay units and FARMC were usually relied on to watch over the coastal areas and to report violation incidents to the Coast Guards, BFAR or LGUs.

A key element that favoured the closed fishing season was that the big players of the sardines industry—canning sardines processors, bottled sardines processors and commercial fishing operators—are supportive of the policy. Since the three sectors are the backbone of the sardines industry, their disposition has significantly elevated the compliance with the fishing ban. In the entire three years of the fishing closure, the incidence of violations reported is low, as there is consensus among the sardines stakeholders that the fishing ban was successfully implemented. The resistance to the fishing ban was mostly during the first year of implementation. After that, most of the stakeholders have already embraced the closed fishing season policy; including the LGUs which initially were not serious in enforcing the regulation. Moreover, the favourable stance of the sardines industry was evident in 2014, the final year of the fishing closure, when the sector overwhelmingly supported the proposal to extend and expand the fishing ban via BFAR Administrative Order Circular No. 255.

Another factor that worked for the closed fishing season’s implementation is the December to February duration period. In general, the fishing closure’s timetable does not impose drastic adjustment to the sardines industry, as it coincides with the traditionally low fish catch which translates to less production and operations. Among the sardines sector, only the commercial fishing operators bore the brunt of the impact of the fishing ban. Most of the 19 fishing companies in Zamboanga City are directly affected by the three-month fishing closure, as their estimated 588 commercial fishing vessels are barred from operating. On the other hand, the bottled sardines processors and the canning processors are minimally affected by the closed fishing season. The 25 active bottled sardines processors’ supplies rely mainly on the catch of local fishermen which operates on municipal waters. The canning sardines processors’ supplies rely mainly on the catch of local fishermen which operates on municipal waters. The canning sardines processors were able to employ strategic measures that mitigate the effect of the fishing closure. For instance, after the first year of implementation, many of the 12 canning sardines processors have utilised cold storage facility to stock up on sardines, enabling them to conduct limited operations during the three-month fishing ban. BFAR and LGUs also provided fishing gear to fisherfolk for catching non-sardines fish species.
The sardines industry players have also employed strategic alternatives to mitigate the effects of the fishing ban. The bottled sardines processors usually shifted to other substitute products, such as milkfish, tuna, or small shrimps, allowing them to continue operation and maintain the bulk of their workforce during the closed season. The canning sardines processors usually scheduled the factory maintenance and cleaning works during the three-month fishing ban. Coupled with their limited operations using buffer stocks, this action enabled them to retain approximately 30% of the workforce. The commercial fishing operators also utilized the closed season for maintenance works. Approximately 5% of their workforce were retained to service and repair on the vessels. In addition, anecdotal evidence suggested that many of the workers in the commercial fishing sector welcome the three-month closed season, since most of them stay at sea for three to six months straight; the fishing ban gives the workers the opportunity to visit their families in the provinces during Christmas. Furthermore, the rehiring rate was relatively high, as around 80% of the workers left for the provinces return after a closed season. For the estimated 20% of the workers who do not return, the great majority of them are ordinary workers (i.e., not highly skilled workers) and thus are easily replaced in the labor market. Moreover, except in the first year of implementation when the number of workers hired dropped, the overall trend in the sardines industry is that the number of workers hired during and after each closed season was increasing. This expansion is paralleled by corresponding increase in production due to surge in fish supply and abundance of larger-sized sardines (Philippine Statistics Authority 2015).

The assistance programs for the affected workers and fishermen have improved in each succeeding year after 2011. For instance, DOLE was largely ineffective in providing assistance in the first year of the closed season, but was able to make adjustments on its actions in the following years. In 2012 and 2013, the agency was able to profile more than 200 and 300 displaced workers, respectively, to avail of its livelihood/employment programs as well as expand the programs’ reach by including benefits for the displaced workers’ dependents. The programs provided training seminars for alternative livelihood (i.e., entrepreneurship and community enterprises) and working capital for purchasing equipments and materials.

CONCLUSION

The general opinion among the sardines stakeholders—the government agencies to the industry players—is that the three-year implementation of the Closed Fishing Season Policy in Zamboanga Peninsula was a success. This consensus was arrived at despite of the challenges, from the agenda setting and formulation to the eventual implementation of the fishing regulation. The three-month conservation measure was instigated to preserve the sardines stock and sustain their supply as well as the operations of industry. Previous events and practices facilitated the enactment of the closed season policy: the decline of the tuna industry in Zamboanga, the fishing closure in the Visayan Sea, the monthly three-day fishing ban in some municipalities of Zamboanga Del Norte, and the “self-regulation” exercised by some canning sardines processors and commercial fishing operators in Zamboanga City. The fishing season policy also benefited from the NSAP and the Gonadal Studies on sardines (which provided the scientific justification), and the strategic move to involve the DILG (which made the fishing regulation a joint venture between DA-BFAR and DILG). Moreover, the central issue that evolved in the formulation of the three-month closed season policy was the starting period, that is whether to commence the fishing ban on November or December in 2011. The issue was resolved when BFAR made a concession in favour of the December starting period since the position was strongly lobbied by the two key players of the industry—the canning sardines processors and the commercial fishing operators—and was supported by the TWG and the LGUs. BFAR’s concession was strategic as it eliminated a key sticking point in bringing into effect the Closed Fishing Season Policy.

During the first year of the implementation of the fishing closure, the limited consultations with the stakeholders on the ground—the fisherfolk and workers, and some LGUs during the formulation of the policy have contributed to the insufficient and disconnected planned safety nets programs for the affected individuals. The late and poor dissemination of information has resulted in misunderstanding and resistance among local enforcers and community stakeholders to the fishing ban. On one hand, the immediate issues on initial implementation of the fishing closure were the lack of cooperation by some LGUs; the lack of monitoring personnel in some areas; the unpreparedness of the sardines industry as a whole; and the inadequate efforts to conduct evaluation studies after each closed season. On the other hand, the key factors working for the implementation of the closed fishing season were the availability of resources (i.e., funds, assets and personnel) allocated solely for enforcement; the fervent support coming from the backbone of the sardines industry (i.e., canning sardines processors, bottled sardines processors and commercial fishing operators); the relative low incidence of violations throughout the 3-year coverage; the mitigated impact of the fishing closure on the sardines industry (except for commercial fishing operators); the employment of strategic means by the sardines industry to counter the effects of fishing ban; and the improvement in provision of the safety nets programs on the subsequent years after 2011.
In spite of some issues and challenges in the formulation and implementation of the Closed Fishing Season Policy for sardines in Zamboanga Peninsula, the overall outcome of the regulatory measure was positive. Most of the stakeholders acknowledge the problem and recognize the suitability of the policy in addressing the problem. Since the viability of sardines industry was on the line, the sardines stakeholders as a whole (i.e., BFAR, the sardines processors, commercial fishing operators, workers and fisherfolk) have strong incentives to seriously push for the measure and make it work. In addition, the closed season was not “hard to sell” since the fishing ban is a commonly accepted conservation measure. Paucity in scientific studies does not debilitate the policy since a closed fishing season is basic — if sardines are given time to reproduce, then logically, their population will increase. Moreover, testimonies are replete indicating favourable results of the fishing ban in Zamboanga Peninsula. Abundance of catch as well as availability of larger than usual sardines have been noted by both the sardines industry and fisherfolk, including other fish species that are tied to sardines, such as tuna, mackerel, and jack. Consequently, these explain why the extension of the Closed Fishing Season Policy via BAC No. 255 s. 2014 has been well-accepted by the sardines industry.

While the three-year closed season in Zamboanga Peninsula was deemed a success, emphasis must be given on post-fishing ban evaluation studies. An assessment is necessary to go beyond anecdotal evidence and scientifically establish if the objectives of the conservation measure have been achieved in an efficient manner. Further studies are also needed to account for any spill-over effects of the closed fishing policy and to continually determine the accuracy of the three-month fishing ban duration since sardines’ spawning period is known to be dynamic. With the possible shift due to climate change (e.g., El Niño phenomenon), the spawning period must be regularly reassessed to ensure that it coincides with the fishing closure period. Another key area that needs to be studied is whether the closed season should be accompanied by other measures such as harvest control. With improvement in cold storage facilities, the sardines processors and commercial fishing operators have a tendency to excessively increase catch before and after the fishing ban. Thus, a limit on the total allowable catch is needed to ensure that the increase in catch does not controvert the goals of the fishing ban. Furthermore, some suggestions are in place for further studies on whether the fishing closure’s coverage can extend to include municipal waters through out Zamboanga Peninsula or encompass other kinds of fish. All of these recommendations echo issues that need to be addressed in parallel with the continuation of the Closed Fishing Season Policy.

ACKNOWLEDGMENTS

This article is the research output of the Policy, Institutions and Governance Team that is part of the multi-agency and interdisciplinary research project funded by the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) (Fund Code N903834) to assess the overall impact of the initial implementation (i.e., 2011-2014) of the Closed Fishing Season Policy for Sardines in Zamboanga Peninsula.

The authors wish to thank the following agencies and organisations: National, Regional and Provincial offices of Bureau of Fisheries and Aquatic Resources (BFAR), Fisheries and Aquatic Resources Management Council (FARMC) and Local Government Units (LGUs) of Zamboanga City and Zamboanga Del Norte, Philippine Fisheries and Development Authority (PFDA), Philippine Coast Guard (PCG), Philippine Industrial and Integrated Labor Union (PHILU), Department and Department of Labor and Employment (DOLE), Zamboanga State College of Marine Sciences and Technology (ZSCMST) of Zamboanga City, Department of Interior and Local Government (DILG), Department of Trade and Industry (DTI), Department of Social Welfare and Development (DSWD) and In-glass Sardine Association (ISDA) of Zamboanga Del Norte.

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