

# Sustaining maternal and child health programs when donor funding ends

*by* Budi Aji

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## RESEARCH ARTICLE

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# Sustaining maternal and child health programs when donor funding ends: A case study of stakeholder involvement in Indonesia

Budi Aji<sup>1</sup>  | Dian Anandari<sup>1</sup> | Henny Soetikno<sup>2</sup> | Herman Sumawan<sup>3</sup>

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<sup>1</sup>School of Public Health, Faculty of Health Sciences, Jenderal Soedirman University, Purwokerto, Indonesia

<sup>2</sup>District Health Office of Banyumas, Purwokerto, Indonesia

<sup>3</sup>Faculty of Medicine, Jenderal Soedirman University, Purwokerto, Indonesia

## Correspondence

Budi Aji, School of Public Health, Faculty of Health Sciences, Jenderal Soedirman University, Karangwangkal Campus, Purwokerto 53123, Indonesia.  
Email: [budi.aji57@gmail.com](mailto:budi.aji57@gmail.com)

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## Abstract

There has been a dearth of evidence in exploring the role of stakeholders in making the transition process from donor to local responsibility successful in relation to maternal and child health programs to date. This study aimed to generate practical experiences concerning stakeholder involvement in sustaining maternal and child health programs when donor support ends, so as to lead systematic strategies for supporting the success of the post-transition process and capture critical challenges of the programme's sustainability. This study employed Focus Group Discussion (FGD) with district healthcare stakeholders such as hospital managers, district health officers, community health centres, community associations and local authorities. In-depth interviews one to one with the local authority, health staff, informal leaders, and traditional birth attendants were conducted. From the final research project sample of participants, we extracted the interviews to analyse their narratives. Content analysis revealed 5 main themes from the FGDs and interviews: (1) Stakeholders' collaborative culture and organisational capacity; (2) Stakeholders' commitment; (3) Challenges in partnership and coordination; (4) Barriers to sustainable local financial support (5) Policy for maintaining institutionalisation. Two areas of concern were the priorities for follow-up to sustain the maternal and neonatal care programme and factors responsible for the continuation when donor funding ends, specifically longevity of stakeholder engagement and commitment and internal resource

capacity for long-term implementation. Recommendations include increased networking of active cooperation from all levels of administration, especially with a top-down approach involving the national, provincial, down to the district and community-based networks.

#### KEYWORDS

donor support ends, Indonesia, maternal and child health, stakeholder involvement, sustainability

#### Highlights

- The involvement of stakeholder engagement became an important factor for the Expanding Maternal and Neonatal Survival (EMAS) programme sustainability after donor ends.
- Stakeholder partnership created a mutual understanding to achieve programme goals and consolidate internal resource capacity for long-term implementation.
- Inadequate human resources, immature network referral system and insufficient financial support were notable challenges of the EMAS programme continuation.
- A long-term commitment and collaboration on the part of all stakeholders facilitated inter-institutional capacity strengthening for supporting programme sustainability.

## 1 | INTRODUCTION

The poor quality of care has become a crucial issue for the high maternal mortality rates in developing countries.<sup>1,2</sup> Lack of human resources and infrastructure are among the major threats to the improvement of maternal and child healthcare.<sup>2-4</sup> Strengthening capacity of the healthcare system in developing countries through donor assistance to support local stakeholders in improving healthcare delivery has been implemented elsewhere.<sup>5-7</sup> However, the reliance on donor support has also constituted a long-term sustainability issue for the transition to local ownership.<sup>8-10</sup>

The transition from donor agencies to domestic acquisition requires a systematic pathway in favour of greater local responsibility for maintaining sustainability.<sup>9,11,12</sup> The donor has a role in this phase by preparing a phase-out period as an institutionalisation process for the local stakeholder. This phase may involve the preparation of structure, management practice, and organisation culture transition.<sup>9,13</sup> It also has consequences in persuading local stakeholders to take over sufficient financing for continuing the programme.<sup>5</sup>

In the context of maternal child health programs, donor assistance transition has an essential challenge due to the fact that there are limited resources among recipient countries.<sup>14-16</sup> This situation is understandable. Therefore, the success of the institutionalisation period is determined by strategic supports from the donor in empowering a collaborative network among local stakeholders.<sup>11,17</sup> However, to date, there has been a dearth of evidence in exploring the role of stakeholders in making the transition process from donor to local responsibility successful in relation to maternal and child health programs to date. This study presents a prospective analysis of the post-transition maternal and child health programme in one district in Central Java, Indonesia.

Between 2012 and 2016, the United States Agency for International Development (USAID) carried out the Expanding Maternal and Neonatal Survival (EMAS) programme to improve maternal and child health in Indonesia.<sup>18</sup>

The EMAS programme aimed to accelerate the reduction of maternal and neonatal mortality rates at the primary healthcare level and hospitals in 128 districts in six provinces, which accounts for roughly 50% of the country's maternal mortality rate.<sup>19</sup> This programme was expected to reduce national maternal and newborn mortality by 25% by 2016.<sup>19,20</sup>

The district of Banyumas in Central Java was selected for the pilot project of the EMAS programme from 2012 to 2016 due to its contribution to the high number of maternal deaths in Central Java. Before the implementation of the EMAS programme, the absolute numbers of maternal deaths in Banyumas had increased from 33 cases in 2010 to 35 cases in 2011. In 2012 when the EMAS programme began, the absolute number of maternal deaths in Central Java was 675 cases, and Banyumas accounted for about 5% of total deaths.<sup>21</sup> Based on the 2017 annual report of the district health office, the maternal deaths in Banyumas were decreased after EMAS intervention from 32 cases in 2012 to 22 cases in 2016. This evidence shows that the EMAS programme intervention had essential outcomes in improving maternal and child health indicators.<sup>22</sup>

In the middle of 2016, the support for the EMAS programme shifted from donor to sustainable locally owned responsibility. This programme entered into the institutionalisation phase where it should be self-funded, measurable, and able to run activities independently with a strong network. The phase-out period required intensely executed transition assuring progressive achievement of the health outcomes, positively protecting benefits to the population.<sup>8</sup> Local governments and other stakeholders became key actors in constituting a good transition practice in international development assistance.<sup>11,23,24</sup> A realistic transition condition should also be explored, particularly in developing countries due to pressure on increasing investment for programme sustainability under the circumstance of limited resources. Strong local stakeholder network may fill the gap in resource allocation after the donor leaves.

This study aimed to generate practical experiences concerning stakeholder involvement in sustaining a maternal and child health programme when donor supports ends, so as to lead to systematic strategies for supporting the success of the post-transition process and capture critical challenges of the programme sustainability.

## 2 | THE IMPLEMENTATION OF THE EMAS PROGRAMME IN INDONESIA

USAID funded US \$55 million EMAS programme to support the Government of Indonesia in dealing with three main issues: (1) improving the quality of emergency obstetric and newborn care (EmONC) services, (2) increasing the efficiency and effectiveness of referral systems, and (3) strengthening accountability amongst government, the community and health system.<sup>25</sup> EMAS programme was implemented by JHPIEGO, an international non-governmental organisation (NGO) affiliated with the Johns Hopkins University, in collaborated with a private maternity hospital *Lembaga Kesehatan Budi Kemuliaan (LKBK)*, the national faith-based organisation *Muhammadiyah*, NGOs Research Triangle Institute International (RTI) and Save the Children. EMAS programme prioritised activities in the district and city levels in six provinces: South Sulawesi, East Java, Central Java, West Java, Banten and North Sumatra. By the end of the programme, EMAS had strengthened over 400 public and private hospitals and intensively supported 700 community health centres.<sup>26</sup>

The intervention of EMAS programme had three phases, which includes Phase 1: July 2012-March 2016 focussed on assessing progress, Phase 2: Jan 2014-Sept 2016 presented an opportunity to identify lessons that strengthens implementation strategies, and Phase 3: April 2015-Dec 2016 designed approaches to institutionalise within targeted districts and expand into additional districts.<sup>27</sup> Using peer-to-peer mentoring for improving clinical performance at facilities and within the referral system was the main intervention. Mentoring supported health facilities to promote accountability, communication and ongoing learning by implementing principles of good care and practices to enhance clinical governance.<sup>28</sup> EMAS programme also worked within districts to improve quality of referral efficiency by establishing performance standards, formalising the referral networks of all health facilities in collaboration with civil society representatives, developing volunteer motivators for outreach programme at the community

level supported by NGO partners, and introducing automated referral exchange system (e-health application) called *SijariEMAS* for digitalising communication between community health centres and hospitals.<sup>27</sup>

Sustainability issue was embedded into EMAS interventions from the beginning of its programme implementation.<sup>25</sup> The EMAS interventions were purposed to support and facilitate existing local government policies and programs, including its tools and approaches; therefore, some activities were funded by using local resources.<sup>26</sup> EMAS programme conducted advocacy and collaboration to promote the district governments to adopt and run the interventions with self-funding. There were 23 of 30 EMAS districts that had been able to institutionalise the interventions, and an additional 35 non-EMAS districts replicated the EMAS programme by using their own local budgets.<sup>25</sup>

### 3 | METHODS

This case study was conducted in the district of Banyumas, Central Java, Indonesia, from January to September 2017. Purposeful sampling was used to yield participants who could provide valuable insight into the sustainability of the programme and differed on a wide range of characteristics. This study employed Focus Group Discussion (FGD) with district healthcare stakeholders such as hospitals, community health centres, district health offices, ex-district team members, community leaders, and NGOs. In-depth one-to-one interviews with the local authorities, patients, and traditional birth attendants were conducted. From the final research project sample of participants, we extracted the interviews to analyse their narratives.

The data collection consisted of conducting 1 hour and 30 minutes to a two-hour long group discussion with the participants. A semi-structured approach was employed throughout the discussion process to allow the emergence of unexpected themes. Some questions were asked during the discussion process, and the researcher probed for in-depth elaboration on the answers provided and emerging themes that the participants identified. In-depth interviews with local authority officers, birth attendants and patients were also conducted to explore how the policy affected the quality of care based on their views.

The purpose of the qualitative data analysis was to identify and characterise as fully as possible concepts and themes emerging from FGDs and interviews. This consisted of a sequence of interrelated steps that included reading, coding, displaying, reducing, and interpreting. Preliminary analysis included multiple readings of all FGDs and interviews. This procedure helped researchers to evaluate the existing data and generate new strategies for collecting better data.<sup>29</sup> In this step, a contact summary sheet was designed to summarise time-limited data for each FGD and interview, which served as an initial step for identifying concepts, themes, and issues that emerged from the FGD and interview. A thematic network analysis was adopted in which concepts and themes were formulated from the text and data.<sup>30</sup>

The qualitative data analysis software package MAXQDA 12 was used to assist the researcher in conducting line-by-line coding to code every single line. The coding process was facilitated by using open coding. Then, codes were grouped and clustered to construct subtheme and main theme. Standards of scientific rigour in the qualitative study as proposed by Lincoln and Guba were used to ensure the accuracy, reliability, data robustness, credibility, fittingness, dependability, confirmability and transferability of this analysis.<sup>31</sup>

Moreover, ethical approval was issued by the ethical committee of the Faculty of Medicine, Jenderal Soedirman University, Purwokerto, Central Java, Indonesia. All participants were recruited voluntarily and required to provide written informed consent before the interview process. All interview transcripts were anonymised and stored in a secure data repository.



## 4 | RESULTS

In total, 7 FGDs were conducted among health staff and managers from the hospital, community health centre, district health office, ex-district team members, community leaders, and NGOs. All FGDs were segregated by role. Moreover, additional in-depth interviews were carried out among nine informants selected from local authorities, patients, and traditional attendants.

Thematic network analysis revealed 5 main themes from the FGDs and interviews: (1) Stakeholders' collaborative culture and organisational capacity, (2) Stakeholders' commitment, (3) Challenges in partnership and coordination, (4) Barriers to sustainable local financial support, (5) Policy for maintaining institutionalisation.

### 4.1 | Stakeholders' collaborative culture and organisational capacity

The key element of success for building strong collaboration among stakeholders was the effort to achieve shared visions and goals of the EMAS programme. Since initial assistance came from a donor, stakeholders had been involved in determining their roles and responsibilities. This built trust and respect among stakeholders and led to their willingness to share their resources. Further, the collaborative culture was accompanied by the efforts to strengthen organisational capacity through creating a collaborative task force as an effective way to assign a specific task and maintain collaborative environment among stakeholders.

Our group discussions with district health offices, hospitals, community health centres, civil society organisations and ex-district team members of EMAS suggested that stakeholder engagement in implementing the EMAS programme had built contributory a collaborative atmosphere and a nexus among actors of the programme. They also described four approaches for strengthening stakeholder collaboration and institutional capacity: shared vision and goals, shared resources, task force, and commitment.

The first step implemented successfully for maintaining sustainability was a shared understanding between policymakers, programme implementers, health facilities, the public, and all involved stakeholders. All actors involved with the EMAS programme view themselves as a part of a worthwhile effort and believe that the programme will achieve the goals through their collaboration.

"At the beginning of the EMAS programme, we believe that nothing is impossible to encourage all element of stakeholder, this is a value for bringing all involved stakeholders to implement and maintain the programme...we used both top-down and bottom-up approaches from district governor to community health centers. Our efforts motivated them to run the programme...recently we see the good results" (one of ex-district EMAS team, male)

"Our district governor has a concern about maternal and child health programme. He has a credo 'working together to decrease maternal death in Banyumas'. District EMAS team also brought this value among us...to date to maintain this value our district governor creates coffee morning meeting regularly" (one of district health officers, male)

Second, shared vision and goals created a willingness among stakeholders to share their resources. Local government leaders and all stakeholders pledge themselves to deal with financial resources to support the programme's sustainability, thus paving the way to keep all programs well-maintained.

"Each year, our hospital allocated budget for Comprehensive Emergency Obstetric and Newborn Care (CEmONC)...for procurement of equipment we needed to improve the quality of services" (one midwife in the public hospital, female)

"We allocated sufficient budget from our own financial resources for Basic Emergency Obstetric and Newborn Care (BEmONC). We hope we could invite clinical mentor twice in this year to conduct capacity building such as training and monitor clinical and referral system performance as well as emergency preparation" (one head of community health center, female)

Third, stakeholder collaboration was associated with a cross-cutting task force. To deal with potentially cross-cutting issues, several task forces were established to focus on a specific purpose such as working group (*Pokja*), civic forum (*Forum Masyarakat Madani*, FMM), and community-based maternal and child health volunteers (*Motivator Kesehatan Ibu dan Anak*, MKIA). *Pokja* consists of key essential persons, that is, district health officers, community health centres, professional organisations, etc. This group focuses on identifying issues and barriers within health facilities and with referral system that impacts maternal and newborn survival.

"*Pokja* has a role in supporting the implementation of the EMAS programme from the beginning until now, after donor leaves...we work together to advocate the authority, health facility and all stakeholders that involve in the efforts to improve maternal and newborn care...now after the assistance ends, we also support the efforts to sustain the programme through internal financial, human and capital resources" (one district health officer, male)

Civic forums (FMM) support civil society networks to encourage public engagement and monitor the quality of care. Meanwhile, community-based maternal and child health volunteers (MKIA) play a critical role in promoting safe delivery in healthcare facilities, increasing public awareness related to danger signs, and ensuring pregnant women have access to care.

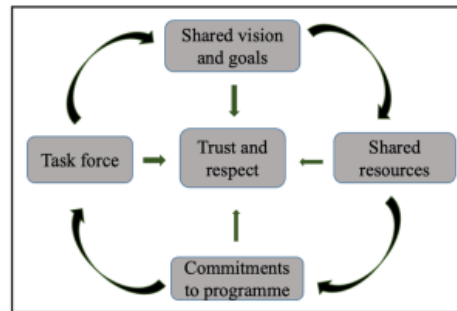
"FMM is still committed to support quality of care for pregnant women although the donor leaves. We have raised public awareness, particularly at the village level. For example, in *Kalisalak* village, we have developed community fund, a micro-financing for pregnant women who deliver at a health facility... we also replicate this model to other villages" (one FMM member, female)

"I supported women whose a high risk of pregnancy. Sometimes her family did not allow her to deliver at a hospital although her condition was in danger. So, I persuaded to her family, convinced them with so many complexities...this my experience, but I am happy to do that to help them. I did it with sincerity" (one MKIA volunteer, female)

## 4.2 | Stakeholders' commitment

Stakeholders' commitment has been a key element of success throughout the institutionalisation process. Common vision and goals need to be shared, trust and respect between stakeholders need to be initiated and supported, resource sharing needs to be created, and the cross-cutting task force needs to be underpinned by a clear commitment from stakeholders as described in Figure 1. We found stakeholders' commitment was motivated by local authorities' leadership and healthcare facilities' support (policy, people, morale, material, and money).

First, commitment and strong leadership from local authorities in maternal and child health programs create moral support for sustaining the emergency obstetric, neonatal care in Banyumas. Our discussions found that under such political leadership at all levels of government and among other relevant actors, the EMAS programme's performance continued to make positive strides even after donor support ended.



**FIGURE 1** Creating collaborative culture, capacity, and commitment. Four approaches for building trust and respect among stakeholders of the Expanding Maternal and Neonatal Survival programme, that is: (i) shared vision and goals, (ii) shared resources, (iii) task force, and (iv) commitment

"The most prominent reason in Banyumas for the success of EMAS programme implementation to date is the commitment of district governor as a policymaker, which is very concerned with the programme" (one district health officer, female)

"In sub-district of *Rawalo*, there has been a general agreement among sub-district authorities and village officers to succeed maternal and child health forum programme. This programme still exists until now" (one FMM member, female)

Second, healthcare providers committed to providing human resources, systems, and communication to maintain the programme's sustainability. Commitment from both community health centres and hospitals was critical to sustaining delivery at scale. This was not only on meeting human resource demands as the programme expands but also on developing the system and communication within the organisation to strengthen the adequacy of programme implementation in the future.

"Although we are a private hospital, but we are committed to maintaining the EMAS programme's sustainability. We commit to recruit more capable human resources, we have our own obstetricians and anesthetists" (one doctor in private hospital, male)

"*Margono Soekarjo* hospital has senior obstetricians who make EMAS programme sustained to date. They not only have innovative approaches for scale up the programme but also motivate, coordinate and communicate to all EMAS programme actors to work together to achieve the goals" (one ex-district EMAS team member, female)

### 4.3 | Challenges in partnership and coordination

Developing strong partnerships and coordination to maintain a sustainable programme also faced several common challenges: limitation of human resources, the suboptimal configuration of the referral network, and challenges with referral communication. These issues remained key obstacles to the existing health system development where EMAS programme also dealt with, persistent during its implementation and post-transition period.

Limitations of human resources were particularly pronounced among healthcare providers in both hospitals and community health centres. Among them were the lack of medical doctors, particularly obstetricians in hospitals and general practitioners (GPs) in community health centres.



"Our hospital faces a shortage of obstetricians although it is a tertiary referral hospital. Ideally, we have 5 to 6 obstetricians. Fortunately, we have recruited one more doctor this year. The lack of obstetrician was a crucial problem because we were in trouble when we were asked to prepare a mentorship and support supervision to other hospitals" (one medical doctor in the public hospital, female)

"I only work alone in this community health center, as a head as well as a GP. For the inpatient care with a total of 26 beds, I have to handle all delivery services...it is very burdensome to me" (one medical doctor in the community health center, female)

The configuration of the referral network and referral communication was another challenge for the programme's sustainability. Coordination of work of the referral system using an e-health application (*SijariEMAS*), monitoring counter/return-referral on cases, and the capacity and competency of a professional staff had become challenges in sustaining an adequate referral system.

"*SijariEMAS* still has a problem; sometimes we could not use it. To solve this problem, we communicate via mobile phone. We only communicated with primary health centers by using a mobile phone so we could prepare before the patients are coming" (one midwife in the public hospital, female)

"Communication for return-referral on cases needs to be intensified particularly between hospital and primary health centers ...if *SijariEMAS* did not work, we used WhatsApp alternatively" (one obstetrician in the public hospital, female)

"Misdiagnosis in the referral of cases sometimes occurred although now is becoming less frequent... it needs to improve the competency of health human resources in primary care level as well as strengthen its system" (one medical doctor in private hospital, male)

#### 4.4 | Barriers to sustainable local financial support

Significant barriers to sustainable internal financial support were identified, including insufficient funding for developing the e-application *SijariEMAS*, lack of funding for emergency drills, and unsatisfactory funding post-assistance.

Our discussion found that insufficient funding for maintaining and developing the e-health application after the donor support ends were barriers to securing the programme's sustainability. Local government played an important role in taking funding from the district government budget to ensure adequate, reliable, and sustainable fiscal support.

"To support *SijariEMAS* application, we need to hire full package of the software. It cost about IDR 120 million a year. However, the budget is limited, about IDR 36 million, so we are only able to hire limited package" (one district health officer, male)

"Limited budget for *SijariEMAS* implementation because of less priority in the local government budget for the information system. It happened in 2017" (one district health officer, male)

Limited funding allocated to emergency drills, that is, a simulation for practicing responsiveness, teamwork, and maintaining skills, was a direct consequence of the donor support ending. Healthcare providers committed to maintaining the drills to improve the capacity of the provider teams to respond appropriately to common obstetric and neonatal complications through self-financing.

"Emergency drills should be carried out by our community health center with our own budget. But we have a commitment to sustaining the drills to provide quality maternal and neonatal health services. We have conducted the drills by using our own resources after the project is finished even with limited funds" (one head of community health center, female)

Another barrier to sustainability was the unsatisfactory level of funding after the donor support ended, particularly among civic forum (FMM) members. Lack of coordination funding and restricted government budget support were the primary problems after the EMAS programme donor assistance ended.

"Coordination in the district level becomes a problem right now because we do not receive a financial support as we did during EMAS programme assistance" (one head of FMM, female)

"After donor ends, district governor commits to take over the financial support by using local government budget...but sometimes it is limited" (one head of district health officer, male)

#### 4.5 | Policy for maintaining institutionalisation

Long-lasting policies have been created for maintaining institutionalisation of the EMAS programme through several actions: reforming the working group (*Pokja*), developing innovative programs at the healthcare facility level, and replicating the EMAS programme in other community health centres and hospitals.

To further improve programme sustainability, the district government changed the name of EMAS *Pokja* to Saving Mothers and Babies *Pokja*. Saving Mothers and Babies *Pokja* took over the monitoring and evaluation process of the clinical governance practice and referral system after the donor support ended. This change also implied shifting budgetary and management responsibility from the EMAS donor to the local government.

"By 2017, after a donor was leaving, the name of EMAS *Pokja* had been changed to Saving Mothers and Babies *Pokja* by using district government decree. This *Pokja* has a role in monitoring and evaluating the implementation of the maternal and neonatal emergency referral agreements that involved 4 CEmONC hospitals and 17 non- CEmONC hospitals. This *Pokja* is also responsible for assessing clinical dashboard and referral system performance" (one district health officer, female)

Tailoring innovation to institutional settings was an effort to adapt in the post-assistance period to support programme sustainability. Our discussion found that healthcare providers developed innovative programs to improve the healthcare facilities network between hospitals and primary health centres.

"Our hospital designed a network to maintain effective communication for referral system with primary care facilities such as primary health centers and family doctors. We call this programme *Pajeromas* Community" (One medical doctor in the public hospital, female)

"*Pajeromas* forum facilitates communication between us in hospital with midwives in community health centers...we created *Pajero's* WhatsApp group for teleconsultation" (one midwife in the public hospital, female)

Replication is the effort to reduce the risk of unsustainability and enhance the ability to be scaled up for much wider implementation across healthcare facilities. To ensure the sustainability process after piloting ends as well as

the adaptation process for relying on internal resource capacity, replication of the EMAS programme was implemented to other community health centres and hospitals.

"After phasing out EMAS programme, we develop a programme modification through programme replication in other 12 community health centers...this effort to improve the referral system in the whole district. Moreover, we have two more hospitals that are certified as CEmONC hospital" (one district health officer, male)

"We will keep the EMAS programme always alive. We also have the responsibility to replicate this programme to other hospitals" (one obstetrician in the public hospital, female)

## 5 | DISCUSSION

The EMAS programme raised concerns about the importance of successful sustainability of a programme assisted by international support, particularly when donor funding ends. The institutionalisation process became an important phase in maintaining sustainability by involving local actors from both public and private entities.<sup>11,23</sup> In the context of empowerment, stakeholder engagement was a driver contributing towards the programme's sustainability and keeping the achievement of desired outcomes through participative resource sharing and collaborative networks.<sup>32,33</sup> Thus, a partnership among stakeholders either public or private established collective commitment and shaped public trust to build a long-lasting and sustainable programme within local ownership with all its limitations.<sup>34</sup>

This study corroborates previously published studies that explored the evidence in identifying the involvement of stakeholders in securing programme sustainability after the donors have gone. Bennett et al. highlighted the need for stakeholder engagement to identify major sustainability issue and support the development of commitment, communication and trust across stakeholders.<sup>35</sup> They concluded that during the transition process, multiple different actors' partnership was essential to determine programme sustainability especially in the resource-constraint environment.<sup>35</sup> Katz et al. also described the stakeholder involvement had created an effective strategy to ensure the sustainability of the programme through stakeholders' policy scenarios that focussed on: programme prioritisation, efficiency improvement, and resource mobilisation by relying on domestic capacity.<sup>36</sup>

Our findings also demonstrate the importance of stakeholder partnership for establishing a collaborative working environment and strengthening organisational capacity. Sustainability was successfully implemented by creating a mutual understanding that in order to achieve common goals and outcome benefits, they needed to implement resource sharing and cross-cutting task forces as the main approaches for building collaboration. As a result, the EMAS programme had been able to be transitioned properly from its donor to local ownership although within resource-limited settings. In terms of coping with resource constraint, Ekirapa-Kiracho et al. found that multi-actor partnerships for maternal and newborn intervention had positively influenced local buy-in, health and human resource, and funding enhancement.<sup>17</sup> Adequate partnerships among stakeholders are beneficial because they consolidate resource-sharing to fill the capacity gap across agencies. Moreover, cross-cutting networks will be much easier to be carried out as part of an effort to achieve sustainable outcomes for the beneficiaries.<sup>17,37</sup>

The lesson learnt from collaboration among multi-agencies to support the programme's implementation in the post-assistance period delivered a message of the value of commitment in building togetherness and trust. Our study described that stakeholders' commitment to the programme implementation was shown by providing moral support under such political leadership and willingness to improve human resource capacity. In addition, the communication system helped to bring sustainability. A recent systematic review using both qualitative and quantitative research by Iwelunmor et al. found that stakeholders' commitment positively influenced programme improvement and facilitated intervention sustainability both during and after piloting.<sup>38</sup> Hirschhorn et al. also identified concerns around all levels

of government and among relevant multi-actors' commitment, although political leadership support also ensured programme continuity.<sup>13</sup> Moreover, it bolstered scale-up initiatives and helped with sustaining delivery at scale.

While sustainability in the EMAS programme was on the right track, challenges and barriers also emerged. Inadequate human resources, immature network referral system and insufficient financial support were notable obstacles that stakeholders at all levels dealt with. Iwelunmor et al. also noted that healthcare worker shortages and healthcare infrastructure were also major barriers to programme sustainability in developing countries.<sup>38</sup> The fragile health-care systems in recipient countries weaken the capacity of human resource infrastructure and technical, programmatic, and financial efforts that also affect future sustainability.<sup>38</sup> Further, as in our study, Eskandari et al. highlighted an immature referral system in low-income countries as the cause for ineffective networks and one of the major challenges of the health system in the future.<sup>39</sup> Strengthening local government capacity for strategic planning and managing involved other stakeholders' commitment needs to be taken up as a matter of urgency so that obstacles related to limited resources can be anticipated. The ministry of health and provincial health offices play an important role in advocating self-financing and adoption issues of the EMAS programme in the national and local planning forums to assure resources for programme sustainability in post-transition be allocated properly.<sup>25</sup>

In terms of policy action to support the long-standing implementation of an EMAS programme after an external donor ends support, we found several efforts that had been executed by local authorities. The transition process had been successfully managed through internal adaptation by developing innovative programs, tailoring a task force, and replicating the programme. Our findings represent the importance of adapting the programme in response to the withdrawal of external financial and technical support by looking at the activities that can be continued (reforming programme, innovative approach, and replication). A 'within district replication', for example, where there was a process of adopting EMAS interventions to non-EMAS-supported facilities, was an effort to strengthen the process of achieving long-term post-transition goals to improve the quality of services and also maintain programme sustainability. This process was funded with a local budget, using both existing and special budget line items.<sup>40</sup> Seppey et al. illustrated that adaptation to the local contexts would enable successful integration into the existing health system and could correspond to sustainability.<sup>41</sup> Moreover, Kilbourne et al. also described the post-implementation adjustment by replicating the intervention to broader organisations as a valuable framework to maximise transferability and foster sustainability.<sup>42</sup>

Finally, our findings suggest that sustainability would be more realistic with a long-term commitment on the part of all stakeholders, and more attention must be paid to building collaboration because it can facilitate inter-institutional capacity strengthening. It is a critical determinant of programme sustainability success. Our study provided applicable evidence and may also be relevant to be transferred to different donor programme interventions, particularly for maintaining sustainability by putting more emphasis on the involvement of multi-actors at any level of government and both public-private entities. However, it is important to note that the EMAS programme had also been put in place with its inherent limitations. Strong stakeholder cooperation has created mutual trust and driven partnership forward to tackle the weaknesses and maintain sustainability even though the significant donor aid was withdrawn.

The main limitations of the current study were, first, since this study was a part of wider implementation study with the involvement of the programme implementers as research team members, they might have directly or indirectly benefited from this evaluation study, they might be in conflict of interest, they might still have a hope of good study results. Although it was impossible to exclude all sources of conflict, recognising conflicts of interest and eliminating those conflicts were substantial efforts that the researcher had done to ensure data trustworthiness. Second, given the subjective nature of qualitative data and limited study participants, the results of this study should be generalised with caution due to the study's characteristic limitations. Therefore, valuable points about sustainability issues of the EMAS programme in the post-assistance period should also be perceived by considering the local context of its study area.

## 6 | CONCLUSIONS

Two areas of concern were the priorities for the follow-up to sustaining the maternal and neonatal care programme when donor funding ends, specifically longevity of stakeholder engagement and commitment and internal resource capacity for long-term implementation. These were the factors responsible for EMAS programme continuation. Supporting government policies for institutionalisation would ensure the achievement of long-term networks among multi-actors to support the sustainability of the programme. Moreover, recommendations also include increased networking of active cooperation from all levels of administration, especially with a top-down approach involving the national, provincial, down to the district and community-based networks.

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## CONFLICT OF INTEREST

The authors declare that they have no competing interest.

## ETHICS STATEMENT

Ethical approval was issued by the ethical committee of the Faculty of Medicine, Jenderal Soedirman University, Purwokerto, Central Java, Indonesia. All participants were recruited voluntarily and required to provide written informed consent before the interview process. All interview transcripts were anonymised and stored in a secure data repository.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

## ORCID

Budi Aji  <https://orcid.org/0000-0001-7148-5808>

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