Using action research for sustainable community development in a remote district of PNG

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Abstract

This article discusses research conducted on a pilot action research project with a gender equity focus in a remote district of PNG in 2015. The research was funded by the Australian Government through the Department of Foreign Affairs & Trade. The project team supported invited participants, using workshops and mobile phones, to address and achieve practical improvements to gender equity concerns in their communities. Action research was chosen because of its participatory nature and its potential to produce actions for change that can be sustained by the people involved without resorting to external resources. The participants self-selected into five action research groups on topics they had identified as of concern in their community. By chance, each group comprised four women and one man. The topics were: community literacy, women in business, women's health, violence against women, and girls' participation at school. Over a period of eight months the authors: introduced and explained the main features of action research to the participants; supported them to design and implement their own research on their group's topic; helped them to develop evidence-based actions to address a problem related to their topic; and encouraged them to reflect critically on the outcomes of their actions for future developments. This article reports on an analysis of the findings from the research on the participants' progress by the end of the first action research cycle at the end of the pilot project. All groups had identified and implemented strategies that showed emerging changes by the end of the pilot project and plans for continuation of their projects after the pilot project ended were in place.

Keywords: action research in remote communities, action research for gender equity, sustaining change through action research

Introduction

This article reports on a research project, conducted by the authors, which investigated whether action research could be used to address gender equity problems in a remote district of PNG. The research was funded by the Australian Government though the Department of Foreign Affairs & Trade with a view to establishing if action research can be used by local people in remote districts of PNG to address their own problems without being dependent on outside resources. This article particularly focuses on the

outcomes of the participants' action research projects and discusses the implications for sustainable change.

The article briefly explains the nature and origins of action research before describing its implementation in the current project. The participants and their action research projects are described followed by the main findings concerning their outcomes and potential sustainability.

Action research

Levin (1946), in his paper titled, 'Action research and minority problems', first described action research as a comparative research on the status and impacts of different types of social actions and research conducted on them that led to community action, which used a research cycle that emphasised planning, implementation and reflecting on the strategies used to address the issues. A similar action research cycle was used in this project.

Action research can be used by an individual to address a matter of concern or by a group that shares a common concern. It is generally relevant to the participants because the focus of the research project is established and carried out by the research participants themselves, and they benefit most from the research findings (Kasl & Yorks, 2002).

Also using action research to address social issues in remote areas promotes local ownership of the issues and assists sustainability of the outcomes. It does so because those affected conduct the research on their problems and identify and develop their own appropriate and practical solutions. This removes the dependency on outside 'researchers or experts' to conduct research and make recommendations for change from their external perspectives. As Blythe, Harre, Sharma, Dillon, Douglas and Didsbury (2013) explain, action research can promote sustainability of projects when researchers support the research participants well in order for them to take ownership of their own issues. The authors adopted this approach in encouraging the research participants to take ownership of identified social issues and address those using available local resources.

The research team stressed the following points to the research participants during the series of AR workshops:

> Action research involves collaboration—working together—to identify and understand a significant problem that the group would like to solve through the implementation and monitoring (research) of a considered action.

> Action research is most productive when everyone collaborates harmoniously to research the problem, agrees to use practical and workable strategies to solve the problem, and shares resources to improve the situation/address the issue.

> Action research enables local communities to use available local resources to improve their own situations with no or minimal use of external resources.
>
> (Evans, Paraide & Casey, 2016, p.5)

The sustainability of the research participants' action research projects was an important element of the researchers' planned action research training strategy. Therefore, the research participants were supported to gain first-hand experience in using action research to address social issues that they considered important as Suarez-Balcazar, Haper and Lewis (2005) explain in their discussion on action research. Allen, Kilvington and Horn (2002) also stated that if action research projects are focused on issues that are important to the communities, then this encourages greater ownership of the projects' outcomes because the people in the local community are encouraged and supported to participate in the decision-making about their own projects. The participants in this particular project presented their plans to continue working on their projects after the life of the project. It has not been possible, however, to establish the extent to which this has occurred due to the mobile phone common user group (CUG) established for the research ceasing at the end of the project.

Implementation of the project

The research occurred in a district in one of the Southern Region provinces of PNG. Invitees were selected in consultation with the appropriate governmental stakeholders. An invitation was distributed throughout the district for interested persons to attend a meeting. At the meeting, the attendees were informed about the proposed research project and the nature of action research and what it would mean for them to participate over the next eight months, during 2015. Those who wished to participate further were then involved with group and plenary discussions of the gender equity concerns and problems for their communities. Initially, it was anticipated that the authors would work with only one action research group, but the number of community members who wished to be involved was much higher than expected. The first meeting was followed four weeks later with a workshop that commenced the development of their action research projects to address their nominated problems. Twenty-five participants attended this workshop and worked in five groups (four women and one man in each) on five different gender equity topics and their associated problems: community literacy, women in business, women's health, violence against women and girls; participation at schooling. As discussed further in the report, outlining this study in further depth:

> The research team reiterated what was involved in the next five months in order to complete their action research. It was important that they understood that their action research involved working as a group for five months to plan and achieve an action, and to research and document its effects (Evans, Paraide & Casey, 2016, p.6).

The participants had varying educational backgrounds. Three of the participants had tertiary education, one of whom was a former employee in the district office and two were retired teachers. Seven of the remaining participants had grade 10 certificates, two were educated to grade 9 level, one to grade 8 and the remaining two to grade 5 level.

Two of these were also formal employees in the district office. It was difficult to categorise the educational background for the remaining participants as they had chequered or interrupted education.

The authors conducted three further one-day workshops at approximately six weeks apart. These focused on teaching and assisting the research participants to use action research to address the community issues they had identified. These workshops followed common action research stages and concepts adapted from those promulgated by the Centre for Education and Innovation (2015). Action research was presented to the participants using the following diagram.
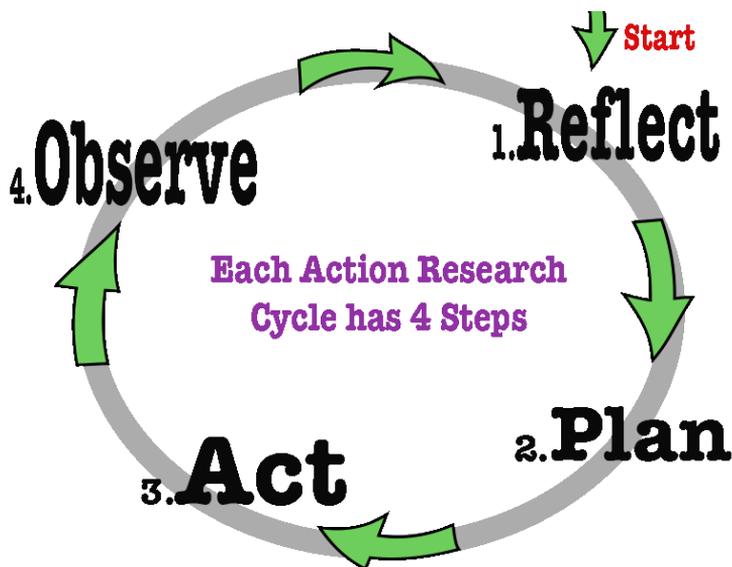

Figure 1: Action research cycle

A copy of this diagram and an action research guide and schedule was provided in notebooks for each participant. Each group presented a progress report to all the participants and the researchers early in each workshop. This enabled the authors to assess the level of progress made and provide assistance as necessary.

At the first workshop mobile phones were provided to each participant together with a briefing from one of the authors on the best strategies for group phone communications. These phones were connected via a CUG that enabled unlimited calls and text messages between the participants themselves and the research team. Regular support was provided through text messages from the resource team and by calls to and from the PNG research team member through text and telephone communication (Evans, Paraide & Casey, 2016, p.7).

The action research projects

As stated previously, the five groups were focused on gender issues centred on: community literacy, women in business, women's health, violence against women and girls' education. The groups had varying reasons for taking an interest in these issues. For example:

- the community literacy group were concerned that currently their communities still had illiterate adults and youths;
- the women in business were concerned that women in communities were having difficulty in developing their limited cash-producing activities into sustainable small businesses using appropriate banking and finance services;
- the women in health group were concerned about the increase in population in their communities because they were of the view that this resulted in difficulties in maintaining a healthy family, providing sufficient food for the family and providing good education for all the children in the family;
- the violence for women group were concerned about violence against women in the homes and were of the view that this created unhappiness in the homes and this affected children in the families most;
- and the education for girls group were concerned about the number of girls who dropped-out of school and how even fewer girls advance to secondary and tertiary education.

(Evans, Paraide & Casey, 2016 pp 11–18).

During the first workshop, the participants were informed about some possible methods of data collection that they may use in their research. Four groups proposed to use predominantly qualitative methods for their research, with the remaining group choosing mixed (quantitative and qualitative) methods. Each group collected data using one or more of: interviews, focus groups, site artefacts, personal journal entries, field notes, observations, questionnaires. Secondary data were obtained from local agencies on matters, such as, school attendance, health incidents, small business activities. These methods helped them to triangulate and validate the data collected. Guidance on these methods was also provided during the second visit and support was provided through telephone conversations and regular SMS messages.

Progress on the data collection, for each of the action research projects, was presented to the other groups and authors during each subsequent workshop. The authors also presented simple data analysis techniques to the participants. This assisted them with their analyses of the data collected. They were encouraged to use their research findings to plan and identify practical strategies using available local resources to address their particular issues. Participants were informed that presentations on their action research project progress were to be done during the third workshop and further guidance was also provided, by the authors, on the required final presentation. Their findings, interventions and what they had learnt during their participation in the action research projects are presented in the next sections.

Findings from researcher participants' research projects

Community literacy
This group's data showed that some of the illiterate people had never been to school and some had dropped out of school before they could master literacy skills. Those who dropped out of school did so for one or more of the following reasons: difficulty in paying school fees, sexual and child labour abuse by relatives with whom they were living to enable easy access to school, illness, some girls were not encouraged to go to school, and long distances to travel to schools (Evans, Paraide & Casey, 2016, p.12).

Strategies used to address issue
Tapping into established available resources, such as, church support systems to provided literacy classes for those who are still illiterate, was the main strategy used to solve this issue. Outside support, such as, free printing of literacy resources from EPSP staff was also used. For example, the research participants sought assistance to print literacy materials that can be used in these planned literacy programs (Evans, Paraide & Casey, 2016, p. 12).

Evidence of change
Some illiterate youth and adults had begun participating in literacy classes. After the project it was expected that this would continue and that others would join the classes (Evans, Paraide & Casey, 2016, p. 12).

Continuation of action research in future
There are established church programs in the communities. The women decided that they would use this system to provide literacy programs to those who were interested in learning to read and write in their own languages, Tok Pisin and Hiri Motu and English. This system will be used to deliver continuous literacy programs for the illiterate youths and adults. Also their local Member of Parliament pledged financial support for the continuation of the use of action research to solve community issues (Evans, Paraide & Casey, 2016, p. 12).

Participants' benefits from action research participation
The participants stated that their participation in the action research project was interesting and worthwhile. They also stated that it enhanced their understanding of the importance of collecting relevant information to deepen understanding of issues during research. They recommended that action research should continue to be applied when researching issues in the communities (Evans, Paraide & Casey, 2016, pp. 11-12).

Women in business
It was found that women were already participating in generating small income activities in their communities. However, management of earnings was an issue among all women involved and therefore needed skills on managing what was earned and budgeting for spending and saving, in order to grow their business (Evans, Paraide & Casey, 2016 p.13).

The participants stated that they were unable to save any of their earnings because they spent them all on their families' needs. In some cases the money was used by the men in the family because the money was not kept by the women. It was also found that transporting produce to the markets, nil market outlets and irregular transport schedule were hindrances for the small business. The participants began to explore taking loans to start up small businesses as the action research project progressed. However, they found that this seemed not to work well because of administrative and financial issues (Evans, Paraide & Casey, 2016).

Strategies used to address issue
One group made the decision to make small financial contributions in order to buy materials for bilum weaving by women. The bilums were sold to earn more money to develop their weaving business. Another group sold cooked food at markets to earn cash. Some women sold garden produce, fish, local meat and other wares in the local markets (Evans, Paraide & Casey, 2016, p. 13).

Evidence of change
As the action research project progressed women were increasingly interested in starting small businesses. They expressed the desired to attend training on how to run small businesses (Evans, Paraide & Casey, 2016, p. 13).

Continuation of action research in future
The participants planned to continue to support women to build up their small businesses. They planned to organise workshops about the basics of running a small business so that the women can start budgeting and begin saving in order to grow their small businesses in the near future. They also secured financial commitment from their local Member of Parliament to support the women to grow their small businesses (Evans, Paraide & Casey, 2016, p. 13).

Participants' benefits from action research participation
The participants stated that their participation in the action research project was interesting and worthwhile. Their participation enhanced their understanding of the importance of collecting relevant information which can deepen understanding of issues during research. They, too, recommended that action research should continue to be applied when researching issues in the communities (Evans, Paraide & Casey, 2016, p. 13).

Women's health
The data showed that the birth records accessed from the district health centre recorded only the births at the district hospital. It did not capture births that occur in the communities. However, the women's health group established that the population was increasing from their own observations. It was then suggested that a better method to capture such data in future may be through interviews with members of the community and access to church records of births (Evans, Paraide & Casey, 2016), p.14.

Strategies used to address issue
Informed by the research data, this group made the decision to conduct awareness on family planning for couples in their communities to reduce family size and the importance of having smaller families. The awareness program had commenced before the end of the pilot project (Evans, Paraide & Casey, 2016, p. 14).

Evidence of change
The women were interested in family planning, spacing of children and having smaller families. The awareness program seemed to have changed the views of women about having large families. The women began to view having smaller families with favour because this allowed more time for the women to participate in other activities and explore strategies to improve their own families' lives (Evans, Paraide & Casey, 2016, p. 15).

Continuation of action research in future
The participants planned to continue to work with the women and their husbands. It is anticipated with such awareness couples will choose to have smaller families in future. The group also secured financial commitment from their local Member of Parliament in order to continue the awareness of the benefits of having smaller families (Evans, Paraide & Casey, 2016, p. 15).

Participants' benefits from action research participation
The participants stated that their participation in the action research project was interesting and worthwhile. They stated that participating in the action research process enhanced their understanding of the importance of collecting relevant information which can deepen understanding of issues during research (Evans, Paraide & Casey, 2016, p. 15).

Violence against women
It was reported that data collection on violence against women was challenging because of its sensitive nature. The data showed that some of the reasons for women being 'bashed-up' by their husbands were: women talk too much (meaning that women say things that annoy their husbands), husbands are jealous, wives are barren, wives and husbands had extramarital affairs, wives or husbands participated in gambling activities and husbands were under the influence of liquor (Evans, Paraide & Casey, 2016 p. 15).

Strategies used to address issue
The women in this group were and are still working with the victims they had interviewed to address their issue. They encouraged and worked with the victims to seek support from the established community support groups. Some of the strategies that the researcher participants identified and are now being used or encouraged to address violence against women are: stop fights between husband and wife (community should intervene when husbands and wives fight) and report the matter to the village peace officer; seek advice from elders in the village to support the couple (s); take the wives away to their family to 'avoid the problem' (traditional practice –to bring peace through mediation

back into the family): seek pastors and church leaders to assist with the reconciliation process: advise customary cooking between the two families (traditional reconciliation activity); ensure church leaders encourage the husband and wife to respect each other as a married couple; identify and create job opportunities for men; encourage husbands and wives to get involved in church activities, such as, camp oust, outreach, sing along (people gather and sing); encourage community leaders to organise programs that can involve husbands and wives—sports, video shows, family picnics—to use to provide guidance on harmonious family life (Evans, Paraide & Casey, 2016, p. 15-16).

Evidence of change
Since the commencement of the awareness program on violence against women and the group working partnership with the community to address this issue, the number of cases of violence against women in homes began to reduce (Evans, Paraide & Casey, 2016, p. 16).

Continuation of action research in future
There are established church family support programs in the communities. There are also traditional support systems in place in the communities for families who experience violence in the homes. The action research participants made the decision to continue to use these systems to provide support for families to reduce violence in the homes. They also now have financial commitment from their local Member of Parliament to support them to continue to work for peace among families in the communities (Evans, Paraide & Casey, 2016, p. 16).

Participants' benefits from action research participation
The researcher participants stated that their participation in the action research project was interesting and worthwhile. Their participation in the action research process enhanced their understanding of the importance of collecting relevant information which can deepen understanding of issues and problems. They too considered that action research should continue to be applied when researching issues in the communities. A most valuable lesson for the participants was the sensitivity of the issue and how to approach sensitive issues when conducting interviews with victims (Evans, Paraide & Casey, 2016, p. 16).

Girls' participation at school
The authors noted that initially the researcher participants were of the strong view that pregnancy was the major cause of low participation of girls in primary schools. As pointed out by Evans, Paraide & Casey (2016) unlike most other nations, PNG primary school children span grades three to eight rather than 'prep' to grade six and, therefore, some of the older girls are particularly vulnerable to pregnancy. However, during the course of the project, the research team encouraged the researcher participants to collect evidence/data from the primary schools to verify that this was the reason.

The data showed that there were many reasons for girls' low participation in primary schools. The participants were able to establish that there were more

female than male students currently enrolled in the primary schools. This is the result of the recent implementation of the tuition fee free education policy by the PNG government. The data also showed that fewer girls were enrolled in school in the past, so the group's initial assumptions were correct to that extent (Evans, Paraide & Casey, 2016). The research established that pregnancy was a relatively minor factor contributing to the reduced participation of girls at primary school. It was also found that other contributing factors to low female enrolment in primary school were child labour, illness, bullying by other students and teachers, and fear of being ridiculed if they made English language mistakes when speaking. Additionally long distances travelled to schools, school fee issues (previously), teacher absenteeism and security issues were also reported as factors. It was also found that school fees for female students' education at post-secondary level are beyond most families' financial means. Therefore, female students generally do not advance beyond secondary education even though they may be academically eligible; this also reduced the numbers, therefore, who can qualify for entry to tertiary education (Evans, Paraide & Casey, 2016 p.16).

Strategies used to address issue
The participants in this action research project used the research data to plan strategies to assist female students to stay in school for the full primary school cycle. Some of the strategies that were used to address the issue of girls' withdrawal from school included: increasing mothers' awareness of the importance of their daughters attending school regularly; making mothers aware that girls have a right to be educated and, therefore, should not be used as 'little mothers' to help around the home during the school day; encouraging parents to begin saving money towards secondary and tertiary education fees so that girls with the ability can continue their education at tertiary level (Evans, Paraide & Casey, 2016, p. 16).

Evidence of change
The mothers are now more supportive for their daughters to stay in school. The participants identified six girls who had dropped out of school for various reasons and encouraged them to return to school to complete their primary education (Evans, Paraide & Casey, 2016, p. 18).

Continuation of action research in future
People in the community, including the action research participants and educated retirees, have planned to continue to work together to encourage parents to enrol their daughters in school and to attend regularly. They also now have financial commitment from their local Member of Parliament to support this group to continue to encourage girls' education in the communities (Evans, Paraide & Casey, 2016, p. 18).

Participants' benefits from action research participation
The participants stated that they benefitted from their action research project personally, both from learning how to perform action research, and from making changes in their community using their own skills and resourcefulness. This group of participants was particularly influenced by the way that

collecting evidence and analysing it revealed their misperceptions of the cause (early pregnancy) of girls' lower participation (than boys') in primary school. They learnt that the evidence, not only revealed the complexity of factors involved, but also that a recent government policy change to provide free basic education had helped reverse the lower girls participation. They showed how action research could be important in the future to address other matters in their communities (Evans, Paraide & Casey, 2016, p. 18).

Conclusion

In this pilot project, the authors supported the participants to apply the action research skills to address gender equity social issues in the communities in this particular district. This project attracted more participation from the women than the men in the communities. The participants were guided on how to collect and analyse data and how to use research data to inform planning and identification of practical strategies that worked in their communities and used existing systems in the communities to address the community literacy, women in business, women's health, violence against women, and girls' participation at school issues.

The women participants, in particular, were committed to addressing their social issues by tapping into local available resources. This can be viewed as the research participants taking ownership of the issues and solving these themselves. This can bring about the sustainability of the projects they may start during projects because as shown in this project, that with action research, the participants developed the desire to continue to improve on the social challenges in their communities. In this sense, prospective and potential sustainability can be seen to reside, both in the individuals who have learnt to conduct action research in their local communities, and also in the outcomes of the action research projects themselves. The above discussion of the five action research groups' work indicates that both these conditions of sustainability were evident at the end of the project—that is, the end of the first cycles of the action research. As noted previously, given the remoteness of the district and the absence of communications with all the participants since the mobile phone CUG ceased, this means that the authors are unable to ascertain to what extent the individuals' capacities and projects' outcomes have persisted or not.

The findings also show positive indications that action research can be used in other PNG remote communities to encourage communities to take ownership of their own issues and address them using available local resources. They may encourage local communities to re-establish a culture of self-reliance and be self-sufficiency so that they are not always dependent on the government and others to address community issues on their behalf.

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