RBF EDUCATION | EVIDENCE



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BANGLADESH

Can Incentives for Community Authors Reduce Shortages in Minority Language Reading Materials?

The project piloted a competition for community development of supplemental reading materials in underserved minority languages in Bangladesh.



Bangladesh struggles to supply quality books in adequate quantities because of the many minority languages spoken.



Results-based financing incentivized community members to take part and create books in local languages.



The Results in Education for All Children (REACH) Trust Fund supports and disseminates research on the impact of results-based financing on learning outcomes. The EVIDENCE series highlights REACH grants around the world to provide empirical evidence and operational lessons helpful in the design and implementation of successful performance-based programs.

Many developing countries have large populations of minority language speakers, including indigenous peoples. A wealth of evidence demonstrates that allowing students to learn in their mother tongue, at least for the first few years of pre-primary and primary school, helps improve learning outcomes. However, many countries face challenges in providing minority language students with adequate learning materials in their mother tongue. These challenges are exacerbated in countries such as

Bangladesh that have many minority language groups.

Results-based financing (RBF) is an important tool to help governments to overcome these obstacles and to ensure that all students have access to quality books in an appropriate language. RBF can provide incentives to stakeholders at different stages of the supply chain, from book development and production to procurement, distribution, and even the use of books in schools and at home.

The REACH Trust Fund provided a grant to the International Research and Exchanges Board (IREX), an education non-profit organization, which partnered with local organizations to conduct a pilot competition to support community development of supplementary reading materials (*Box 1*) in underserved minority languages in Bangladesh. The intervention provided training to participants in the use of book creation software and awarded cash prizes at a public award

Box 1: What are Supplemental Reading Materials?

Supplemental reading materials are books or other reading materials that complement the core textbooks for a curriculum with additional information, alternative learning approaches, alternative languages, and/ or knowledge of relevant subjects not directly covered by the school curriculum.

ceremony for the best books, which were then printed and distributed to

schools and made available digitally on a government website.

CONTEXT

Bangladesh has one of the world's largest school systems with more than 21 million students enrolled in pre-primary and primary education.1 However, only 58 percent of 10-year-olds in Bangladesh are able to read a simple passage with little or no help, a smaller proportion than other countries including Botswana, Cambodia, or India.2 One of the challenges faced is the country's wide variety of languages-41 in total, of which 16 are in common use. In Bangladesh, indigenous students—those from outside the main Bengali ethnic group are half as likely to complete primary school. One of the reasons for that is that they do not understand the national language, Bangla, which is the language used in their schools.3 Evidence from a wide range of countries suggests that allowing students to learn in their mother tongue, at least in the

early years of education, improves learning outcomes.⁴

In 2010, Bangladesh introduced a new National Education Policy that committed to providing mother tongue education in pre-primary and lower primary grades. However, operationalizing the policy has been slow because of a lack of adequate textbooks and learning materials in minority languages. Furthermore, traditional publishing companies do not see much demand for supplementary reading materials as only a little more than 1 percent of Bangladesh's population speaks a language other than Bangla.5 The situation is exacerbated by the slow and complex government procedures involved in book procurement. Surveys conducted as part of the intervention confirmed that while parents appreciated the value of mother-tongue education they reported difficulties in obtaining reading materials in the



simple passage.

correct languages. Therefore, the intervention set out to harness community expertise to find low-cost ways to produce small print runs of minority language reading material. The intervention was implemented by IREX along with two local partner NGOs, Zabarang Kalyan Samity and Save the Children Bangladesh.

WHY WAS THE INTERVENTION CHOSEN?

The intervention was designed to address the particular barriers to ensuring an adequate supply of supplementary reading materials, particularly in minority languages. These barriers were identified by means of an assessment exercise involving visits by the project team to a number of minority language-speaking areas. Despite the government's commitment to providing minority language reading materials, it had no record of any authors working in minority

languages nor any means to identify them. There were also no suitable tools for the production of supplementary reading materials and no established channels for the editing, quality assurance, printing, and distribution of such materials. However, surveys conducted as part of the intervention confirmed that while parents appreciated the value of mother-tongue education they reported difficulties in obtaining reading materials in the correct languages.

Therefore, the intervention set out to harness community expertise to find low-cost ways to produce small print runs of minority language reading material. A results-based approach was used to encourage community members to take part and create books. This took the form of a competition for participants with cash prizes, trophies, and recognition within the community given to the best authors.



Photo courtesy of GPE/Chantal Rigaud



Illustrator at the Marma Onuprerona competition. Photo courtesy of IREX

HOW DID THE INTERVENTION WORK?

The intervention offered cash prizes and trophies as well as recognition at a public award ceremony to those community members who prepared high quality supplementary reading materials during a specially held workshop. The competition, called the Onuprerona ("Inspiration") Book Challenge, was conducted in the Khagrachari district in the Chittagong Hill Tracts, a region in Eastern Bangladesh with a high proportion of minority language speakers.

Book Challenge

Reading Festivals

Events to recruit participants

Competition Round 1

4+ books to be created in two local languages by each participant

Competition Round 2

Participants can collaborate to produce as many books as they can in two local languages

Public Award Ceremony

Cash prizes and trophies

To recruit participants, the team raised awareness of the competition by hosting more than 100 traditional "reading festivals" in communities in the Khagrachari district, followed by a district-level festival involving parents, teachers, and education officials. The competition was then held in two rounds. Each round included two competitions, each for a particular local language. In the first round, books were prepared in Chakma and Kokborok and, in the second, for Marma and Bangla. Although Bangla, the native language of the majority Bengali population and Bangladesh's official language, is not a minority language, it is widely spoken in the region, and it was felt that it was appropriate to include it to help to mainstream and popularize the competition approach to book development.

Books in each language were prepared during a two-day workshop. The workshops began with three hours of training on the requirements of the competition and the Bloom software, with participants spending the remainder

of their time preparing drafts of supplementary reading materials and entering them into the software.

The approach varied slightly between rounds. In the first round, each participant produced at least four books of different types, but this proved difficult for some participants and meant that the quality of the finished products was low. In the second round, participants were free to produce as many or as few books as they wished. In the first round, participants produced their books individually, while in the second round collaboration was encouraged. For example, one author with limited computer skills but with a pool of story ideas could partner with another author who had better computer skills and could quickly convert story ideas into text using the Bloom software. This made for a much more efficient process. With the removal of the requirement for each participant to produce multiple books, the organizers expected that the second round would yield about half the

number of the books produced in the first round. However, by the end of the second round, participants actually produced slightly more books than in the first (131 as opposed to 121).

A group of tribal language experts and district education officials then reviewed the submitted books, provided editorial feedback, and selected the winning titles. The winning authors were then presented with cash prizes and trophies at an award ceremony attended by members of the district and regional councils and of the national

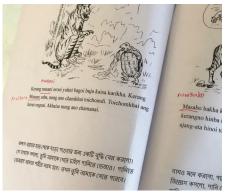
education ministry. A limited run of the winning books was then printed and supplied to local schools. The winning books were also posted in digital form on the Teacher's Portal, an online library used by teachers nationwide through a partnership with the government's Access to Information Program (A2i).

Before and after the competition, the project team conducted surveys of the workshop participants and parents to track any changes in their attitudes to supplementary reading materials in minority languages and their impact on their children's learning.6 To accurately measure the change in opinions over time, the team assigned values to each answer and created average scales for positive and negative attitudes based on three types of survey questions: (a) cognitive, which measured beliefs about minority language instruction; (b) affective, which measured feelings about minority language instruction and current levels of provision; and (c) behavioral, which measured the respondents' ability and willingness to support efforts to create more minority language reading materials in their communities.

WHAT WERE THE RESULTS?

The competition led to the development and publication of 61 new supplementary reading materials. A total of 101 participants over the four workshops submitted 252 books for review, of which 61 were selected for prizes and publication-16 in Bangla and 15 in each of the other languages. A total of 30,000 copies of the winning titles-between 7,000 and 8,000 in each language—were then printed and distributed to local schools and to a local development organization. The books were also posted to the Teacher's Portal to be accessed free of charge by teachers from across Bangladesh working with students in each language group.

The inclusion of results-based financing fostered participation in the competition, particularly the opportunity it gave authors to be recognized. The competition entrants who were interviewed said that the possibility of having their work included in the Teacher's Portal, a well-known governmentsupported initiative in Bangladesh, was a key part of their motivation for taking part in the competition as well as the availability of cash prizes and trophies. Participants also cited having motivations that stemmed from a desire to preserve and ensure the future of minority languages. The team concluded that, although the financial incentive attracted a large number of participants, these intrinsic and reputational motivations may have attracted a higher quality standard



During the final review and feedback workshop, authors received support from local language experts to refine



In addition to trophies, winning authors received signed certificates and a cash prize. Photo courtesy of IREX

of participant than would have been attracted by cash prizes alone.

The competition method cost less than other means of book production. Taking into account the costs of promoting and running workshops, selecting and editing the winning books, holding the award ceremonies, and providing cash prizes and trophies, the cost of developing a book through Onuprerona was estimated to be only US\$181, which was one-third lower than the cost of producing a book through a private sector publisher and less than one-third of the cost of producing a book through an international NGO. A number of factors helped to reduce the cost, including the free Bloom software and the fact that participants used their own computers for the

workshops. The cash prizes and the cost of the other awards represented a small portion of the overall cost, suggesting that the workshop approach to production and the competition aspect could both be scaled up at low cost.

The competition changed community attitudes in favor of minority language learning and supplementary reading materials.

The endline survey revealed a high degree of support from parents for measures to aid minority language learning. Parents indicated a strong belief that learning in a child's mother tongue is a necessity for future educational success and that minority language children should learn to read in their mother tongue before learning in Bangla. The competition participants agreed

that children have a right to learn to read in their mother tongue. More than half of the surveyed participants believed that there is little to no market demand for supplementary reading materials in minority languages, but most agreed that the competition and similar initiatives could play an important role in filling the gap. In this area, both parents and participants grew more enthusiastic following the competition, with parents becoming more likely to express confidence in their ability to help their children to access supplementary reading materials and participants becoming more confident in their ability to produce materials. Both parents and authors expressed significantly more positive attitudes in the endline survey than in the baseline survey across all three types of measures.

WHAT WERE THE LESSONS LEARNED?

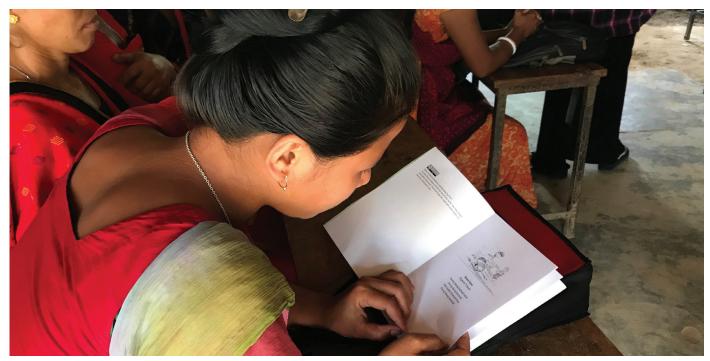
Parents in Bangladesh support the idea of children learning to read in their mother tongue. Despite the evidence that instruction in the student's mother tongue is beneficial in the early grades, parents in many countries have expressed reservations about minority language education, preferring students to learn in languages that they associate with greater employment opportunities.

However, all parents surveyed at the endline agreed that children have a right to learn to read first in their mother tongue and that supplementary reading materials should be made available to support this. Instead, parents blamed a lack of supply for the few minority language supplementary reading materials that were available prior to the intervention, with 63 percent agreeing that price is a barrier to the availability of these materials and 86 percent agreeing that there is a lack of skilled local writers to produce the texts. Almost all of the parents-96 percent-said that the Onuprerona competition

had encouraged them to support children to read supplementary reading materials in mother tongue in a way that is easier and appropriate for children.

The Bloom software has great potential to produce books at low cost in low-income countries but cannot entirely substitute for conventional book production.

Participants in the workshops generally learned how to use the free Bloom software during the three-hour dedicated training session and expressed a high degree of satisfaction with the software, describing it as easy to use and



A parent reads one of the winning Onuprerona Book Challenge books. Photo courtesy of IREX

flexible in accommodating a range of languages and alphabets. This makes it a useful tool to create supplementary reading materials quickly and at a low cost. However, bloom is designed to produce books that can be printed on a personal inkjet or laser printer in monochrome. This keeps costs down, but the resulting products cannot match the durability nor the print quality of a product from a professional printing house.

The intervention's low cost and efficiency make it suitable for replication in other ethnically diverse regions of Bangladesh.

The intervention included three hours of training on the use of the Bloom software and orienting participants to the rules of the competition, with the remainder of the workshop

being dedicated to creating the content and the books themselves. With 101 participants across all the workshops, this amounted to around 300 total hours of training, which generated 61 finished titles. This is a relatively productive return on investment compared to other training programs, and the trained participants could go on to produce additional titles in future with little or no additional training. Therefore, the Onuprerona approach seems to have strong potential to be expanded to other regions of Bangladesh.

Future RBF approaches may also need to incentivize the government to distribute the titles created by communities. Although all 61 titles were uploaded to the Teacher's Portal, a few months after the completion they were no longer

available. Following discussions between the implementing partners and A2i, the problem was resolved and access to the books was restored. Nevertheless, the inaccessibility of the books just months after they were first made available may reflect the absence of a results-based incentive for the government to distribute the books and make them available on the online portal.

Ninety-six percent of parents said that having available reading materials in local languages encouraged them to support more reading at home.

CONCLUSION

The Onupreruna competition has demonstrated that there is a demand for minority language supplementary reading materials. In surveys carried out both before and after the competition, parents and participants emphasized their desire for affordable access to minority language learning materials and supplementary reading materials and pinpointed the lack of supply as the key barrier to access.

The results-based financing approach used by the intervention was

successful in attracting participants to the competition and easing the supply constraint. Specifically, they were attracted by the prospect of having their work highlighted in the Teacher's Portal, although they also had an intrinsic desire to support minority language learning. Designers of future interventions may need to consider providing additional incentives to the government to ensure the distribution of created books.

The competition has created a cadre of trained and experienced authors in four key local languages in the Khagrachari district. These authors

have all of the skills and materials needed to produce additional supplementary reading materials, which eliminates a key barrier to the successful implementation of the government's policy commitment to providing early years education in the students' mother tongues. Consideration is now being given by the implementing partners to expand the Onuprerena approach to other regions of Bangladesh. It also has the potential to be replicated in other countries with underserved minority language populations.

RESULTS IN EDUCATION FOR ALL CHILDREN (REACH)

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¹ Global Partnership for Education: https://www.globalpartnership.org/where-we-work/bangladesh

² World Bank (2019). "Ending Learning Poverty: What will it take?" Washington D.C.

³ Save the Children. "Shishur Khamatayan-MLE Supporting Hardest to Reach though Mother Tongue Based Multilingual Education." Available at: https://bangladesh.savethechildren.net/sites/bangladesh.savethechildren.net/files/library/MLE.pdf.

⁴ For a review, see Jacob, W. James, Sheng Yao Cheng, and Maureen K. Porter, eds. (2015). Indigenous Education: Language, Culture, and Identity. Dordrectht, Netherlands: Springer.

⁵ Faquire, A.B.M Razaul Karim (December 2010). "Language Situation in Bangladesh". The Dhaka University Studies. 67: 63-77

⁶ The surveys were conducted only among the Chakma and Tripura communities.