





In 2018, with support from the Bill and Melinda Gates Foundation (BMGF), PxD undertook the development of "Ama Krushi" - a customized, two-way digital information service to provide millions of smallholder farmers in Odisha with targeted, relevant and actionable advice. Ama Krushi was conceptualized as a Build-Operate-Transfer (BOT) program, where PxD would build, iterate on, and scale this service to reach 1 million rice farmers over 3 years, following which implementation and funding would be handed over entirely to the government.

PxD's information dissemination model typically involves high upfront research and development costs that are needed to build, test, and iterate on an impactful service that is custom targeted to user needs. Governments (or institutional funders) are often not willing or able to pay the upfront capital required for these set-up costs and this is where the BOT model can be transformative. In the case of Ama Krushi, BMGF provided the upfront capital needed to build the service, while the Government of Odisha covered ongoing implementation costs. Importantly, the cost of adding an additional user to the service at scale is proving extremely low (< \$0.22 per user per year as of 2023), making it extremely attractive for governments to pay for implementation costs at scale.

PxD completed the transfer of the Ama Krushi service to government ownership in June 2022, with day-to-day management support provided by Tatwa Technologies, a local firm contracted by the government through a public procurement process. At the time of transition, the service was reaching over 3.2 million farmers and covered 28 value chains including several crops, animals and fisheries - a significant expansion from the original scope.

Overall, the transition was a success: the service is now entirely government-funded, and government-owned, with nominated officials from Department of Agriculture and Farmers Empowerment (DAFE) providing strategic oversight. Local operational teams built by PxD including data collection staff, agronomy teams, field staff, continue to operate under the new management. PxD also transferred its technology platform, 'PADDY', monitoring protocols, content databases and more under the BOT arrangement. The Ama Krushi service continues to run uninterrupted, and continues to scale – reaching over 5 million farmers as of June 2023. – and evolve – with new functionality including Al-driven chatbots continuing to be developed on top of the core service.

Below we summarize important learnings from the transition which might be useful for other implementers, governments, and funders in the wider development ecosystem to reflect upon when considering similar exercises.



1. Transition begins on Day 1

In hindsight, we would have taken a few different actions from Day 1 to entrench the transition more deeply into the minds of the government and our teams. We recommend:

- The implementing organization(s) and the government agree upfront on (i) which components will be transitioned, (ii) when the transition will begin, and (iii) who will take on the implementation of the service post-transition. PxD assumed that we would transition the management of the service to government personnel but in Year 3, the government advised us that they would like to contract the management of Ama Krushi to a third party via a procurement process given the complexity of the service. This involved reconfiguring transition plans, familiarizing ourselves with government procurement processes, and delayed timelines.
- Embedding a liaison from the implementing agency that sits out of the government office to build an "organizational face" with callback value that can provide real-time updates and follow up on administrative requests.
- Embedding at least one government official into implementing operations to navigate leadership changes within the government, push forward transition requests, and design systems with government infrastructure and processes in mind.
- Building technology on government systems and for government from Day 1. Simple things like
 hosting the Ama Krushi website on a government-owned domain or building systems that are
 accessible to non-technical staff much earlier in the transition process, can save time and effort
 down the line.



2. Budget for Flexibility in Time and Costs

Ama Krushi evolved from a 1 million farmer program providing Interactive Voice Response (IVR) based advice to rice farmers to include additional delivery channels (live call center, radio, in-person hybrid models), partnerships across new content areas (women's groups, kitchen gardens, livestock, fisheries), and new features (collecting feedback about extension worker performance, schemes). Unforeseen events (such as the COVID-19 pandemic) and dynamic requests further ate into projected timelines. Buffer periods and funding are always advised, and there is value in identifying 'flex' resources that can be pivoted to work on changes quickly without disturbing larger timelines.

While being flexible in meeting government requests builds trust and longevity of the service, the implementing agency should set expectations on how much can be done without sacrificing service quality and/or transition success. For instance, an expansion to a new government department (livestock and fisheries) in Odisha led us to ask for, and successfully unlock, additional funding from the government that was critical in expanding the teams, technology and government relationships needed to expand the service to new value chains.





3. Buy-in from local teams is critical to success

Under the transition arrangement, the Ama Krushi implementation teams (call center, field, content, administrative) would continue to operate under new management post-transition. Building robust implementation teams that work relatively autonomously is critical to ensure the service continues to function smoothly even as management changes. Some learnings include: (i) Informing local teams of the transition from the very beginning, including designing contracts and scenario planning with the transition timelines in mind, (ii) leveraging local team knowledge in designing the transition structure through regular consultations - for example, our call center presented a plan for agent rotation that would allow agents to continue daily operations while also participating in the capacity handover with little to no interruption in service delivery, (iii) for critical positions or functions in the operational team, we recommend putting succession planning in place by proactively training multiple staff members for critical tasks.



4. Document institutional knowledge

During the relatively short overlap period we had with the new agency, the protocols we had developed were critical reference material to ensure that Ama Krushi runs without interruption.

There were two challenges we faced: (i) limited understanding of what degree of detail would be needed by the new agency, and (ii) limited time and attention devoted to documentation when there seemed to be more pressing implementation-related tasks. We recommend early consultation to map out the different processes that need to be cataloged; ongoing documentation rather than a time-consuming one-off exercise towards the end of the project; and version control given the constantly evolving workstreams.





5. Build capacity to develop a dynamic service as part of the transition

The service outlined in the original MoU and the service transitioned looked quite different from each other. As the service grew in success, we found ourselves responding to new requests while simultaneously documenting existing service protocols and training operational staff members in preparation for the transition. We recommend: (i) determining a basic service threshold i.e. the last stable configuration of the service that allows teams working on transition and new feature requests to be closely aligned, while still leaving room for experimentation and testing and (ii) involve the new implementing entity in responding to the requests to quickly build system comprehension. For example, we supported Tatwa Technologies to build an API on top of Ama Krushi to pull and push data into the Odisha government's new central farmer database as part of the handover training.



6. Government and donor buy-in is critical for transition momentum

The transition strategy was devised in collaboration with the Odisha administration and driven largely by the transition committee appointed and overseen by the then Principal Secretary. The government's commitment to delivering the transition was best reflected in their succession planning, as key decision makers changed throughout the cycle with each successor building on and actively contributing to transition planning. Additionally, the support offered by administrative officials was invaluable during the procurement process, particularly in expediting requests to offset pandemic-induced delays. The flexibility demonstrated by BMGF, particularly by approving a bridge funding request in light of the pandemic, was critical in a successful transition. Regular and honest communication with donors and government partners is critical in ensuring continued buy-in to the transition process.



7. Not all components of a program transition have equal success

While implementation and scaling of the service continues uninterrupted, program monitoring, quality control systems, iteration, and innovation have not kept pace. It may not always be realistic to find one agency that can absorb the different capacities that are required to run multi-faceted programs like Ama Krushi, and highlighting potential gaps from the outset would have helped manage what we might expect from a successful transition. In hindsight, we might have explored an external consulting role - for PxD or other organizations to take on and ensure that the service continues to innovate and generate evidence on what works.

Almost a year after the transition, Ama Krushi continues to play an integral role in the larger mission of the state to empower smallholder farmers, and Ama Krushi was able to transition without there being any downtime or barriers in access throughout the period of the handover. This pioneering effort would not have been possible without the unwavering support of BMGF and the Odisha State Department. Ama Krushi is a testament to how governments, foundations and development organizations can collaborate to serve millions of smallholder farmers. We are excited to see how Ama Krushi continues to grow - we are already seeing interest from several state governments to replicate, iterate on, and scale similar models and explore additional value-added services, ultimately moving closer to our goal of reaching hundreds of millions of smallholder farmers across the world with meaningful information that improves their livelihoods and builds resilience.

