

# Catalyzing Change

IMPROVING YOUTH SEXUAL AND  
REPRODUCTIVE HEALTH THROUGH DISHA,  
AN INTEGRATED PROGRAM IN INDIA

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ICRW

International Center  
for Research on Women  
where insight and action connect





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Badlao Foundation

Center for Communication Resource Development  
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Integrated Development Foundation (IDF)

Tribal Cultural Society (TCS)

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# Catalyzing Change

## IMPROVING YOUTH SEXUAL AND REPRODUCTIVE HEALTH THROUGH DISHA, AN INTEGRATED PROGRAM IN INDIA

The Development Initiative Supporting Healthy Adolescents (DISHA) was one of the first large-scale integrated programs in India to address the broader context of young people's sexual and reproductive health needs. In addition to providing youth with sexual and reproductive health information and services, the program sought to tackle the social and economic constraints that often limit their choices and actions.

Program designers increasingly have adopted similar comprehensive approaches to improve adolescent health issues. Still the number of these programs remain few, and the international community has much yet to learn on whether—and to what degree—a complex and comprehensive program alters youth behaviors and results in better health outcomes.

For DISHA, the results are in. And they suggest that such a large-scale, integrated program holds potential and promise for improving young people's sexual and reproductive health. Consider this: Married youth who were exposed to the DISHA program were nearly 60 percent more likely to report current use of modern contraceptives than non-exposed youth.

Moreover, the DISHA program offers important insights on how to implement a large-scale integrated program in India and elsewhere.

### INTEGRATED PROGRAM APPROACH

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The International Center for Research on Women (ICRW) and local nongovernmental organization (NGO) partners, with support from the Packard Foundation, designed, implemented and evaluated DISHA in two Indian states: Bihar and Jharkhand. The two states, the Packard Foundation's priority states in India, are among the country's least developed. They are characterized by poorly functioning public health systems, persistently high fertility rates, poor reproductive health outcomes and conservative gender norms.

To implement the program, ICRW partnered with six local NGOs: three each in Bihar and Jharkhand. Each NGO had worked on health and social development within its community for more than a decade. The integrated program was conducted from 2005 to 2007 in 176 villages.

The DISHA activities stressed youth participation and focused on the following outcomes:

- Improve youth skills and capacity through peer education, youth groups and livelihoods training;
- Create an enabling environment for meeting youth sexual and reproductive health needs by building community support;
- Ensure youth-friendly sexual and reproductive health service delivery and access; and
- Build the technical and implementation capacity of the partner NGOs.

To evaluate DISHA's integrated program, ICRW conducted a quasi-experimental study that collected quantitative data through baseline and endline household surveys, qualitative data through focus group discussions, and program monitoring data. The evaluation also assessed progress in institutional capacity among the partner NGOs, drawing on monitoring reports and periodic organizational assessments.

## RESULTS SNAPSHOT

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Evaluation results clearly demonstrate that behavior change occurred in DISHA communities, despite the relatively short duration of the project and the challenging setting. DISHA successfully improved key behaviors, as shown through increases in age at marriage and sharp rises in contraceptive use among married youth.

### BEHAVIOR CHANGE HIGHLIGHTS:

- **Age at marriage increased by nearly two years to just shy of 18.**  
At baseline, the mean age at marriage was 15.9, and more than 50 percent of girls in the sample were married in the two years prior to the start of DISHA, nearly 60 percent before the age of 18. In contrast, only 40 percent of the 198 girls married during the two-year DISHA program were younger than 18 at marriage. And by endline, the average age at marriage among girls surveyed had increased by nearly two years to 17.9.
- **Contraceptive use increased among youth by nearly 60 percent.**  
Married youth who were exposed to DISHA were nearly 60 percent more likely to report current use of a modern contraceptive method than similar youth who were not exposed to DISHA.

At the heart of the program design were activities to improve youth and adult knowledge and attitudes on early marriage and reproductive health as a way to stimulate this behavior change. DISHA saw improvements in these areas as well.

### KNOWLEDGE & ATTITUDINAL CHANGE HIGHLIGHTS:

- Youth exposed to DISHA were **14 percent more likely** to know the legal age at marriage for girls than non-exposed youth.
- Youth exposed to DISHA were **17 percent more likely** to know where to access oral contraceptive pills than non-exposed youth.
- Adults exposed to DISHA were **7 percent more likely** to feel girls should wait until they are 18 or older to marry than non-exposed adults not exposed to DISHA.

DISHA also was somewhat successful in changing norms regarding certain dimensions of empowerment, mainly spousal communication, self-efficacy within the context of marriage, and mobility, but less so regarding communication with elders and self-efficacy prior to marriage. For example, girls exposed to DISHA were 60 percent more likely to be able to travel unaccompanied outside the village to seek health service than unexposed youth. However, no significant program effect was seen around girls' ability to communicate with their parents about their marriage preferences.

## LOOKING FORWARD

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The results summarized above and detailed more fully in the report suggest that an integrated approach to improving youth's sexual and reproductive health can lead to significant results and deserves further consideration as an approach to youth and reproductive health programming. Based on the DISHA experience and evaluation, ICRW would encourage funders to support, and program designers to pursue, similar approaches so that additional lessons can be learned on how best to implement integrated programs.

Toward that end, the DISHA project offers the following lessons learned and recommendations to keep in mind when implementing a large-scale, integrated program.

- **DISHA's integrated program has improved key sexual and reproductive health outcomes.**  
**Recommendation:** Invest in implementing and evaluating different integrated programs to improve youth sexual and reproductive health outcomes.
- **Integrated programs present significant implementation challenges.**  
**Recommendation:** Integrated programs may be best implemented in settings with adequate infrastructure, economic opportunities and implementation capacity. In less ideal settings, it may be better to strategically select program components.
- **More intensive, individualized intervention activities generally yield better results. That said, community-level activities can lead to improved sexual and reproductive health outcomes, and may be a cost-effective alternative.**  
**Recommendation:** Where resources are available, activities that allow more intensive interaction with youth and communities are worth undertaking for more comprehensive change, while broader community activities may be a cost-effective alternative for large-scale integrated programs when resources are limited.
- **The sequencing and duration of program interventions affect the success of integrated programs.**  
**Recommendation:** Given the multiple components of integrated interventions, it is important to align capacity building and intervention roll out so as to allow sufficient time for all the integrated components to be operational in the field, and to ensure that "supply" is in place as "demand" is generated.

- **Youth are an important resource in defining and meeting their sexual and reproductive health needs.**

**Recommendation:** Youth need to be recognized as crucial partners in implementing and sustaining sexual and reproductive health interventions, particularly in settings where other resources are limited.

- **A core set of technical capacities and organizational principles are essential for implementing and sustaining integrated programming over the long term.**

**Recommendation:** Given the importance of local NGO partners for long-term sustainability of youth sexual and reproductive health programs, lead partners and donors should invest in and help strengthen local NGO technical capacities and commitment to core organizational principles.



# Catalyzing Change

## IMPROVING YOUTH SEXUAL AND REPRODUCTIVE HEALTH THROUGH DISHA, AN INTEGRATED PROGRAM IN INDIA

### INTRODUCTION

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Researchers, programmers and advocates increasingly recognize that programs to improve sexual and reproductive health outcomes among youth should go beyond providing information and services to address the broader social and economic environment affecting youth (Dixon-Mueller 1994, Simmons et al. 1990). However, large-scale, integrated programs that meet youths' varied needs are scarce, particularly in poor, rural communities. To address this gap, the International Center for Research on Women (ICRW) and local partners designed, implemented and evaluated the Development Initiative Supporting Healthy Adolescents (DISHA) in the Indian states of Bihar and Jharkhand. DISHA's integrated program was conducted in 176 villages over a two-year period, from 2005 to 2007. This report examines the accomplishments and limitations of implementing DISHA, summarizes the key findings from assessing DISHA's impact on youth and adults, and analyzes efforts to strengthen NGO capacity to carry out a multisectoral approach to youth sexual and reproductive health programming.

### CONTEXT

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Bihar and Jharkhand are among the least developed states in India, characterized by poorly functioning public health systems, persistently high fertility rates, poor reproductive health outcomes, conservative gender norms and low levels of development. Youth (ages 10-24) comprise one-third of the population, and adolescent girls typically experience early marriage, early childbearing, poor ante- and post- natal care, and low rates of modern contraceptive use. During the planning phase for DISHA, the 1999 National Family Health Survey (NFHS-2) showed that 71 percent of girls aged 20-24 years were married before 18. The median age at marriage for these girls was only 15.7 years, and half had given birth by age 19. Once initiated, childbearing typically proceeded with little spacing between children; only 3.8 percent of married girls aged 15-24 used modern temporary methods of contraception (IIPS 2000). In such conservative and resource-poor settings, youth reproductive health is likely to be dependent on individual, community and infrastructural factors.

To develop DISHA, ICRW convened a meeting with 25 representatives of youth-serving NGOs in Bihar and Jharkhand. These experienced implementers noted that adolescent sexual and reproductive health programs that focused on the delivery of information and services alone were inadequate and supported an integrated approach. ICRW also used the stakeholder meeting to evaluate the capacities of local groups to implement DISHA. Bihar and Jharkhand did not have large local

NGOs undertaking programs with youth on a significant scale, and technical capacity for sexual and reproductive health programs and other sectoral efforts to support youth was generally weak. In its partner selection process, ICRW emphasized the presence of basic institutional infrastructure and integrity, a strong community base, and a history of adolescent programming in at least one of the likely components of an integrated model. Based on these criteria, ICRW established a partnership with six local NGOs: three in Bihar and three in Jharkhand. Each organization had worked on health and social development within its community for more than a decade.

## NGO PARTNERS FOR THE DISHA PROJECT

### BIHAR

**Center for Communication Resource Development (CENCORED)** builds strategic planning and technical capacity of field-level voluntary organizations and community members, especially women. CENCORED promotes people-centered development by strengthening women's and children's education and providing services and support for local self-governance and participatory communication. Through the DISHA project, CENCORED covered 35 villages.

**Daudnagar Organization for Rural Development (DORD)** conducts rural development programs focused on a variety of areas, including maternal health for young, married women; health care for the elderly; HIV awareness among truckers; and livelihood opportunities for youth. DORD works with the government to strengthen the public health system and thereby improve health services in the community. DORD worked in 20 villages to implement DISHA.

**Integrated Development Foundation (IDF)** works to improve the quality of life of underprivileged and marginalized groups, with a primary focus on women's empowerment through such mechanisms as self-help groups. IDF also focuses on adolescent sexual and reproductive health and disaster management and works with key government and non-government agencies and members of the local community. Through the DISHA project, IDF covered 18 villages.

### JHARKHAND

**Alternative for India Development (AID)** is a large NGO that works in six Indian states to empower the poor by creating self-governing communities that ensure basic rights, basic education, health security, gender and social equality, and livelihood security. AID conducts programs on education, reproductive health and local leadership. AID worked in 45 villages to implement DISHA.

**Badlao Foundation** aims to empower tribal communities by increasing awareness of and advocating for their rights and entitlements. The foundation also conducts projects to improve health facilities. It has been accredited by the National Open School and Indira Gandhi National Open University to provide women's education programs. Through the DISHA project, Badlao covered 40 villages.

**Tribal Cultural Society (TCS)** works to protect and promote tribal culture and ensure development opportunities for tribal people. TCS also focuses on expanding educational and livelihood opportunities (e.g., handicrafts and businesses run by women's self-help groups, adult and vocational education). Through DISHA, TCS worked in 18 villages.

## DISHA PROGRAM DESIGN

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DISHA was designed with four objectives:

1. Increase access to modern family planning and sexual and reproductive health services for married and unmarried male and female youth aged 14-24 years;
2. Delay marriage and childbearing among youth and strengthen their ability to make informed decisions about reproductive health matters, especially among females;
3. Provide youth with alternatives to early marriage through livelihoods skills and options; and
4. Build informed leadership and capacity for promoting youth sexual and reproductive health by addressing the interconnected health, economic, social and cultural issues that are central in their lives.

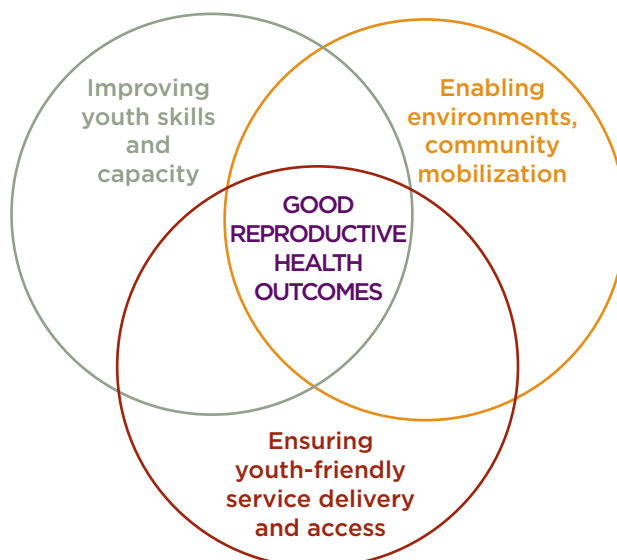
Three programmatic components reflected DISHA's approach to addressing both sexual and reproductive health and the sociocultural and economic factors that influence sexual and reproductive health outcomes among youth (see Figure 1):

1. Improving youth skills and capacity;
2. Creating an enabling environment by building community support for meeting youth sexual and reproductive health needs; and
3. Ensuring youth-friendly sexual and reproductive health service delivery and access.

To help ensure the sustainability of these three components, DISHA also sought to build the technical and implementation capacity of NGO partners.

**FIGURE 1:**

### INTEGRATED PROGRAM DESIGN FRAMEWORK



## 1. YOUTH SKILLS AND CAPACITY

For young people to be active decision-makers in their own lives, they must understand their rights and have adequate skills to exercise their health and development options. The youth skills and capacity component, therefore, focused on building skills in areas such as communication, negotiation and leadership. It also worked to build young people's self-confidence and decision-making abilities through the following interventions.

### Youth groups

DISHA established nearly 600 youth groups and almost 30 youth resource centers in the participating villages. Together, these provided young people with health information on a range of topics, including adolescence, gender and sexuality, fertility awareness, contraception, HIV and AIDS, safe motherhood, and reproductive health services. They also provided safe spaces for young people to come together to access information and services and participate in livelihood training.

### Peer education

DISHA trained a cadre of volunteer peer educators (PEs)—married and unmarried males and females—to provide information, counseling, support and referrals to their peers through youth groups and individual sessions. The PEs formed a crucial bridge to health service providers and adults in the community, advocating for youth and negotiating specific cases with parents or other gatekeepers. Youth nominated PE candidates and NGOs selected one to two candidates per youth group. DISHA trained a total of 828 PEs. Most (81 percent) remained active through the duration of the project and received further training and consistent monitoring and support.

### Livelihoods

The livelihoods component aimed to create income-generating opportunities for youth while building the skills necessary to develop and maintain viable enterprises. To help strengthen the design and implementation of this component, two local organizations, Dhriiti and Rangasutra, provided technical guidance. In selecting income-generating opportunities, DISHA partners considered the potential for sustainability, a viable buyer base, the availability of supplies and the market environment. Some livelihood examples include training youth to make products such as pottery, candles and bangles for market; training in tailoring; vegetable cultivation; and puffed rice production. Where possible, NGOs also linked youth to microsavings and credit groups. By the end of the project implementation period, 69 livelihoods groups engaged 676 youth.

## 2. COMMUNITY SUPPORT FOR YOUTH SEXUAL AND REPRODUCTIVE HEALTH NEEDS

In the project communities, adults traditionally make decisions for adolescent girls, including when and whom they will marry. Further, adults play a primary role in providing young people with information and access to reproductive health services. Therefore, changing adult knowledge and attitudes around early marriage and sexual and reproductive health is fundamental to establishing a supportive environment for youth, a central component of DISHA. By focusing on adults in project villages, the following interventions aimed to transform the local context to enhance the reproductive health and life options of young people.

### **Community entry and mobilization**

Initial activities developed a rapport with the broader community, specifically youth, and established alliances with stakeholders. NGOs engaged community leaders and introduced DISHA in April 2005, a few months prior to the core implementation period. Building on this foundation, NGOs undertook mass communication activities—street plays, wall writings, thematic fairs, rallies, mobile health clinics and sporting events—to sensitize and orient the community to issues such as the consequences of early marriage, and youth reproductive health needs, including contraception.

### **Adult groups and youth-adult partnership groups**

DISHA partners established adult groups in each village, with separate groups for women and for men. Facilitated by NGO staff, adults discussed a range of topics, from reviewing the project's baseline findings on the status of youth in their communities, to exploring the roles parents play in shaping their children's lives. DISHA also developed 68 youth-adult partnership groups in response to requests for joint forums to explore issues such as youth development and well-being, the role of family, and inter-generational conflicts.

## **3. YOUTH-FRIENDLY REPRODUCTIVE HEALTH SERVICES**

Access to reproductive health care was challenging in the project communities, where providers and clinics were few and far between. DISHA included a component that addressed the need for youth-friendly, community-based reproductive health services for married and unmarried youth. To ensure that DISHA would meet youth needs, NGOs first built youth understanding of reproductive health issues and then obtained their input on how best to structure this component.

### **Youth-friendly health services**

Based on input from youth group members, DISHA identified 108 private sector health service providers (HSPs) who covered the full intervention area. These HSPs were trained in reproductive health skills, service quality and youth-friendly services including general reproductive health counseling, contraceptive services, sexually transmitted infection (STI) diagnosis and treatment, and safe motherhood (e.g., antenatal care and safe delivery). EngenderHealth, an international NGO specializing in reproductive health, provided technical assistance for training HSPs.

### **Youth contraceptive depot holders**

Youth recommended a more private, confidential access point for personalized counseling and contraceptive needs at the village level—ideally, young people themselves. As a result, DISHA developed a cadre of youth depot holders (YDH) comprising 313 youth, including married and unmarried males and females. YDHs were drawn largely from peer educators and active group members who were nominated by their peers. DISHA's YDHs were specially trained in contraceptive counseling and social marketing. (Population Services International and DKT Janani, two leading nonprofit social marketing organizations, helped train youth depot holders.

## **BUILDING NGO CAPACITY FOR SUSTAINABILITY**

Each implementing partner had experience working on youth and reproductive health issues and brought a range of perspectives and approaches. All partners, however,

needed additional support to implement DISHA's integrated program and ensure its sustainability. To build capacity, ICRW and technical assistance partners conducted ongoing "learning by doing" training in four key areas:

- (1) Technical capacity in adolescent sexual and reproductive health and livelihoods;
- (2) Monitoring and evaluation;
- (3) Fundraising; and
- (4) Networking.

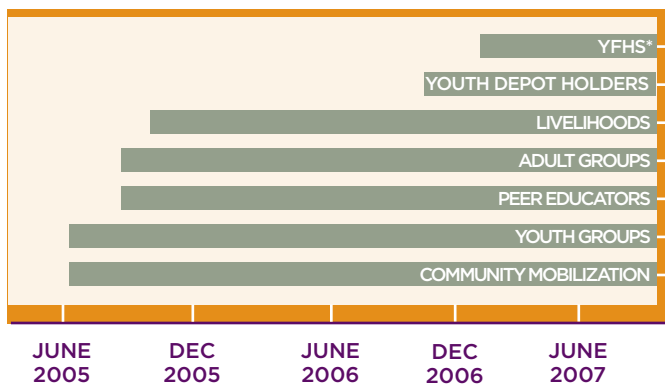
Over the course of the project, two additional areas for capacity building emerged: NGO operational systems (staffing, financial management, communication and reporting) and project implementation (planning and management).

### **DISHA IMPLEMENTATION PERFORMANCE AND LESSONS LEARNED**

From June 2005 to July 2007, the DISHA team was largely successful in implementing the components of its integrated program. Rolling out multiple interventions in 176 villages through six NGO partners presented challenges in planning and coordination. DISHA's participatory approach, which emphasized careful start up of the project to ensure community support and engagement, also encroached on the time available for implementing activities (see Figure 2). Evaluation and capacity-building activities added to the complexity of DISHA, requiring extra time and effort from all partners throughout the implementation period. Given these challenges, some adjustments to DISHA's intervention design—in terms of the number or scale of activities, and/or the duration of implementation—were necessary.

**FIGURE 2:**

#### **ROLLOUT AND DURATION OF KEY DISHA INTERVENTIONS**



Note: There was limited implementation of livelihood activities until December 2006. Community entry began in April 2005, before the full start-up of activities.

\*Youth Friendly Health Services provided by newly trained Health Service Providers

As shown in Table 1, DISHA met most performance targets and reached a large number of youth within the full planned catchment area of 176 villages. DISHA fell substantially below target in the livelihoods component, which reflects the complexity of the livelihoods work and most partners' limited experience in implementing such activities.

**TABLE 1:**

PERFORMANCE RESULTS FOR DISHA			
DISHA OUTPUT INDICATORS	PLANNED	ACTUAL	SUCCESS RATE
Total villages	176	176	100%
Youth groups	704	595	85%
Total youth reached via youth groups	12,200	11,791	97%
Youth resource centers	30	29	97%
Peer educators	924	828	90%
Livelihoods groups	176	69	39%
Adult groups	352	352	100%
Adult-youth groups	unplanned	68	n/a
Health service providers	coverage for full project area	108	100%
Youth depot holders	352	313	89%

Key insights and lessons learned about implementation focus on how feasible or challenging it was to carry out such a complex program.

### 1. PEER EDUCATORS

Overall, peer educators provided an important mechanism for reaching young people, especially where project villages were remote and youth including married girls were more isolated. PEs were particularly effective in transmitting information and ideas, but less so when it came to providing contraceptives or referrals for sexual and reproductive health services. PEs were more comfortable when working with peers in individual sessions or groups, and less confident with larger advocacy efforts at the community level.

- **Peer education is a viable, effective channel for reaching rural youth on a large scale.** Young people demonstrated capacity and motivation to be effective PEs, even without financial compensation. The retention rate was 81 percent, and most drop outs were unrelated to the project, such as married males seeking employment or unmarried females leaving for marriage.

- **PEs need ongoing, on-site training and monitoring support.** Support helps motivate youth and ensure a level of quality control. However, it also adds to the responsibilities of NGO field staff and, as such, needs to be planned and budgeted for at the outset.

- **PEs can be more effective with focused roles.** Limit responsibilities to those within youth “comfort zones” to improve PE performance and streamline NGO support.

## 2. ACCESS TO YOUTH SEXUAL AND REPRODUCTIVE HEALTH SERVICES

To increase youth access to services, NGO partners used local resources, namely private health service providers and youth depot holders. DISHA successfully developed these community-level, youth-friendly resources. However, there were some challenges during implementation, and monitoring data did not demonstrate meaningful youth uptake of services from these resources.

- **Obtaining youth input in identifying appropriate providers is important, but takes time.** DISHA solicited youth input before implementing the youth-friendly provider element, which resulted in less time than anticipated to promote this component and build awareness and interest among youth to use services.

- **Social marketing activities should be well-coordinated to ensure youth are properly supplied.** DISHA increased youth access to contraceptive services by linking YDHs with social marketing agencies. The link provided a contraceptive supply, and YDHs had an opportunity for some financial return. However, supply lines were difficult in some rural villages that were not easily reached by the social marketing agencies’ regular distribution networks. Despite this obstacle, the YDHs successfully counseled their peers about contraceptives, and their presence laid the foundation for an alternative source for contraception. Comprehensive contraceptive education and counseling combined with well-coordinated supply lines would increase the effectiveness of this component.

- **Train both female and male health service providers to meet diverse youth demands and balance gaps in service provision.** Monitoring data showed that youth sought out YDHs of the same sex for contraceptive products. This highlights the value of having both male and female distributors and may partly explain why uptake from private providers—who were all male—was relatively low. There were additional challenges with some female YDHs whose families did not approve of their involvement in selling condoms.

## 3. LIVELIHOODS TRAINING IN SEXUAL AND REPRODUCTIVE HEALTH PROGRAMMING

Livelihood training was one of the most innovative elements of DISHA’s integrated programming to address youth needs more holistically. Despite DISHA’s limited scale and duration, the program was able to engage youth and begin to build their capacity.



- **Consider local contexts to determine the feasibility of livelihoods interventions.**

While integrating livelihoods into sexual and reproductive health programming had solid conceptual grounding, the practical realities of Bihar and Jharkhand made its execution difficult. The conditions in the DISHA sites were not conducive to economic activity due to a lack of government and private sector infrastructure. Therefore, the task of creating livelihood opportunities for youth was extremely challenging among the NGO partners, especially for those without prior experience in this area.

- **Manage expectations of youth, their parents and the community.** Unrealistic ideas of immediate and large financial returns can cause more harm than good, particularly in economically poor areas where entrepreneurial and employment opportunities are scarce.

- **Young people are more engaged when they had input in determining their livelihood activity.** DISHA partners made a deliberate effort to involve youth in the process of selecting appropriate skills and trades for the livelihoods component. The emphasis on a market-oriented approach was important and helped build youth understanding of local opportunities and how best to sell their products and services.

- **The formal financial sector can sometimes act a barrier to the success of livelihoods interventions.** In India, youth must be 18 or older to open bank accounts and access government loans and benefits. This regulation created design and implementation challenges for partners and in some cases limited programming options.

#### 4. COMMUNITY SUPPORT FOR YOUTH SEXUAL AND REPRODUCTIVE HEALTH

DISHA's community mobilization efforts provided an important entry point by helping to build trust within the villages and facilitate access to young people.

- **Men are key target audiences because of their role as decision makers in their children's lives and futures.** Fathers, however, were difficult to engage because they were often busy with work demands. Creative approaches need to be developed to bring adult men in as partners.

- **Women did not always see themselves as affirmative actors of social change.** Mothers participated in DISHA activities, but many women were not confident that they could play a role in changing social norms or creating a more supportive environment for their sons and daughters.

- **Established networks increase adult participation.** One NGO partner introduced DISHA activities through an existing network of women's groups. This was a particularly successful strategy because meetings were better structured and women were more comfortable discussing sensitive issues in a familiar environment.

## 5. PARTNER IMPLEMENTATION EXPERIENCES

Despite significant differences in perspectives, organizational capacity and technical skills, all six partners were able to implement DISHA, albeit with varying levels of ease and complexity. Not all NGOs were able to translate the numerous training and capacity building efforts into effective action. However, partners often compensated for this shortcoming by mobilizing other strengths, such as strong community connections, demonstrating that an array of factors is crucial to the implementation of complex youth sexual and reproductive health programming.

- **Established networks and trust within communities are important assets in implementing activities that address sensitive issues.** NGOs that had a history of previous work within a community were well-positioned to implement components that require trust from participants.
- **NGOs that view communities as owners and implementers of projects have stronger programs and responses from youth and communities.** NGOs that cultivate community agency, where everyone from local leaders to peer educators is responsible for change, had greater engagement at the village level, which might have had a positive impact on project outcomes.
- **Some NGOs need time to learn how to view youth as partners and not only beneficiaries.** Many of DISHA's core activities relied on youth input during the design phase and youth action during the implementation phase. For some NGO staff, this required a shift in how they viewed and worked with young people.
- **Training of trainers or field staff for effective adolescent reproductive and sexual health programming requires both attitudinal shifts and facilitation skills.** NGO animators and field staff needed to be comfortable with their attitudes about sexuality and young people as well as with using non-didactic, interactive techniques to better engage youth and adults.

## IMPACT EVALUATION DESIGN

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### RESEARCH QUESTIONS

ICRW identified the following key research questions for assessing impact. Answers to these questions could inform the wider adolescent and sexual reproductive health community in India and globally:

1. As an integrated program, did DISHA have a positive impact on age of marriage, reproductive health, livelihoods and empowerment?
2. Did DISHA have a positive impact on community and adult attitudes on early marriage, reproductive health, livelihoods and empowerment?
3. Did DISHA improve youth access to reproductive health services?
4. Did DISHA enhance institutional capacity of partner NGOs to undertake and implement youth programs?

## METHODOLOGY

ICRW used a quasi-experimental study design with intervention and control groups to evaluate the programmatic impact of DISHA. The study collected quantitative, qualitative and program monitoring data throughout the life of the project. The evaluation also assessed the institutional impact on NGO partner capacity by analyzing the context in which partners evolved, drawing on monitoring reports and periodic NGO assessments.

## DATA

From September to December 2004, ICRW conducted baseline, cross-sectional, household surveys among married and unmarried, male and female youth, ages 14-24 years (n=4,645), and among adults aged 30 years and older (n=1,601) living in all six of the NGO catchment areas. The samples were drawn using systematic random sampling. Similar surveys were conducted three years later (September to October 2007) in the intervention and control sites. The sample sizes for the youth and adults from both intervention and control sites at endline were 4,323 and 1,562, respectively.

Findings from 36 focus group discussions (FGDs), conducted after the endline surveys, were used to contextualize quantitative findings regarding changes in reproductive health knowledge, attitudes and behaviors; provide insights and feedback on DISHA program interventions; and allow youth to express their opinions on changes in reproductive health information, life skills and empowerment for normative and behavioral changes.

Data from partner quarterly reports over 15 reporting periods, monthly ICRW field visits, and other reporting and monitoring activities provided insights into implementation procedures, challenges and successes around specific project components.

## ANALYSIS

A three-pronged approach was employed to analyze program impact:

1. Compare changes in outcome variables from baseline to endline in the intervention area.<sup>1</sup>
2. Estimate DISHA's program effect on outcome variables by using multivariate propensity score matching (PSM) techniques to compare DISHA participants to non-participants in the intervention and control groups at endline.<sup>2</sup> Of the total youth sampled at endline, 3,326 were from intervention areas, of whom 2,004 adolescents (60 percent) reported participating in at least one DISHA intervention activity. Table 2 shows a breakdown of program exposure by sex and marital status.
3. Examine the effect of depth of exposure to DISHA activities on key outcomes of interest using multivariate analysis. Two depths of exposure were measured and defined as:

<sup>1</sup> Political instability, floods and demographic shifts impeded endline data collection in some of the control sites thereby preventing an analysis of changes over time in the control group.

<sup>2</sup> For PSM analysis, youth respondents were matched on sex, age, marital status, number of children, education level, religion, social caste, wealth and state. Adult respondents were matched on sex, age, religion, social caste and state.

TABLE 2:

DISTRIBUTION OF YOUTH RESPONDENTS WHO REPORTED PARTICIPATING IN ANY DISHA INTERVENTION ACTIVITY, GENERALIZED OR INDIVIDUALIZED	
	NUMBER OF RESPONDENTS
Unmarried males	250
Married males	935
Unmarried females	329
Married females	490
<b>Total number of respondents</b>	<b>2,004</b>

TABLE 3:

DISTRIBUTION OF YOUTH RESPONDENTS WHO REPORTED PARTICIPATING IN ONE OR MORE INDIVIDUALIZED DISHA INTERVENTION ACTIVITIES	
	NUMBER OF RESPONDENTS
Unmarried males	86
Married males	317
Unmarried females	54
Married females	119
<b>Total number of respondents</b>	<b>576</b>

a. **Mass or generalized** interventions (e.g., dramas, wall murals, community meetings, etc.) that had limited engagement with youth. Of the 2,004 adolescents in the youth sample who were exposed to DISHA, 1,428 reported only participating in a generalized DISHA intervention.

b. **Targeted or individualized** interventions (e.g., youth groups, livelihood groups, etc.) that provided a more interactive and frequent exchange with youth. Almost 30 percent, or 576 youth from the sample, reported participating in at least one individualized DISHA intervention activity. Table 3 breaks down by sex and marital status those participants who engaged in an individual or targeted intervention.

Both youth and adult multivariate depth of exposure regression models controlled for age and state. Youth models also controlled for marital status and wealth; adult models controlled for sex. These analyses helped determine if the more targeted, individualized interventions resulted in greater impact than the mass, generalized interventions.

## RESULTS

### PROJECT OUTCOMES AND IMPACT

#### 1. Youth Level Outcomes

The data show significant improvement in youth knowledge and attitudes with regard to many of the desired outcomes. Many of these changes were attributable to DISHA, and greater depth of program exposure often resulted in stronger impact.

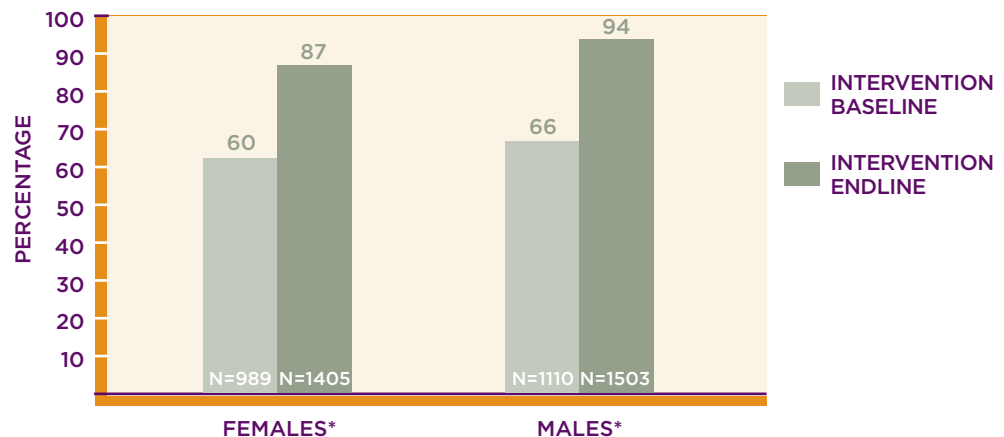
#### Knowledge and attitudes

A primary goal of DISHA was to ensure that youth in the intervention areas were equipped with complete and accurate information regarding marriage and sexual and reproductive health options. In comparing baseline and endline data, youth knowledge and attitudes around marriage improved significantly. At endline, 63 percent of female youth and 72 percent of male youth knew that the legal age at marriage for girls in India is 18 years, an increase of 30 percent for both groups from baseline. Further, the proportion of youth who believed that girls should wait to marry until they were 18 or older increased by a third (Figure 3).

DISHA successfully increased youth knowledge of all six modern contraceptive methods promoted by the program, though outcomes varied between Bihar and Jharkhand.<sup>3</sup> For example, significant increases in knowledge of all methods were observed for males and females in Jharkhand and females in Bihar. However, among males in Bihar, significant increases were only seen for condoms and male sterilization. Changes in contraceptive awareness were most pronounced among females. For example, knowledge of condoms, the cheapest and most easily accessible contraceptive method, was already high among married males at baseline (90 percent). However, among married females, knowledge was much lower at baseline (48 percent), but increased significantly by endline to 68 percent.

FIGURE 3:

#### YOUTH WHO BELIEVE THAT THE IDEAL AGE AT MARRIAGE FOR GIRLS IS 18 YEARS OR OLDER, BASELINE AND ENDLINE



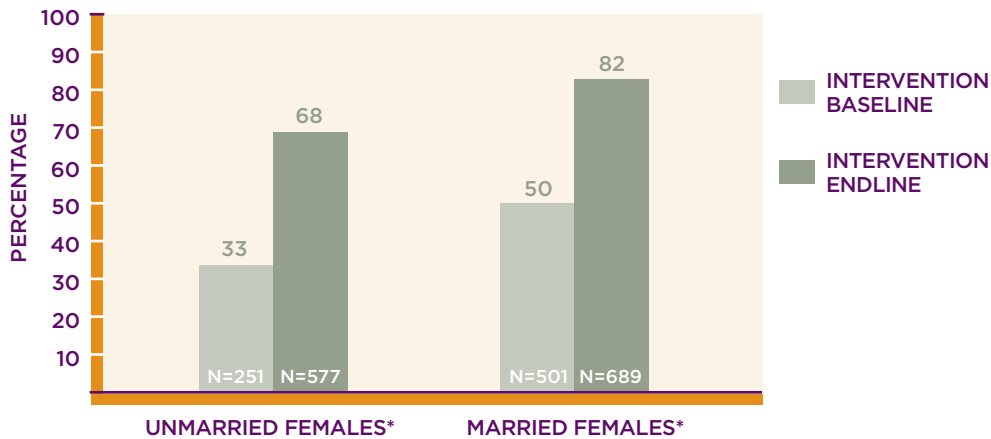
\*  $p < .05$

<sup>3</sup> Modern contraceptive methods that DISHA focused on included: oral contraceptive pills, condoms, intrauterine devices, Depo-Provera © contraceptive injections and male and female sterilization.

DISHA emphasized information about oral contraceptive pills among females because it is a non-invasive, female controlled, temporary contraceptive method. Importantly, knowledge on how to access the pill significantly increased among married female youth, from about 50 percent to 82 percent (Figure 4).

**FIGURE 4:**

**KNOWLEDGE OF SOURCE OF ORAL CONTRACEPTIVE PILLS, UNMARRIED AND MARRIED FEMALE YOUTH, BASELINE AND ENDLINE**



\* p<.05

In terms of improving youth attitudes about their use of contraceptives and reproductive health services, results were most profound among females in Bihar, where more than half of all female youth disapproved of contraceptive use among married couples at baseline compared to only 13 percent who felt this way at endline ( $p<.0001$ ). Interestingly, attitudes among females in Bihar did not differ significantly depending on their marital status.

How much were these changes attributable to the program as opposed to other influences? When compared to matched individuals who were not exposed to DISHA in the control and intervention areas, the effect of the program on marriage and contraceptive knowledge and attitudes remains significant, providing evidence that some of these increases are attributable to DISHA. Youth exposed to DISHA were 14 percent more likely to know the legal age at marriage for girls in India. The program's effect on changing youth attitudes around the ideal age at marriage for girls was small but statistically significant. Youth exposed to DISHA were only 4 percent more likely to think the ideal age at marriage for girls was 18 or older than matched youth not exposed to DISHA. Ideally, a stronger attitudinal program effect was desired, but any change in attitudes around this deeply entrenched social norm is an important step in the right direction.

A larger program effect was seen for contraceptive knowledge outcomes. Youth who were exposed to DISHA were 15 percent more likely to know about condoms and 17 percent more likely to know how to access contraceptive pills than youth not exposed to DISHA. Again, the program had significant, though smaller, effects around

attitudes. Adolescents exposed to DISHA were 5 percent more likely to believe that contraceptives should be available to young married couples than matched youth not exposed to DISHA.

The significance of depth of exposure was examined using multivariate analysis. Table 4 shows that any type of exposure to the DISHA program significantly improved youth knowledge and attitudes regarding age at marriage and contraceptives, and individualized exposure had a stronger effect. On ideal age at marriage, for example, males with individualized exposure were almost twice as likely as those with generalized exposure to consider age 18 or older as the ideal age for girls to marry. Females with similar exposure were almost four times as likely to believe 18 or older was the ideal marriage age.

**TABLE 4:**

<b>EFFECT OF PROGRAM EXPOSURE ON EARLY MARRIAGE AND CONTRACEPTIVE KNOWLEDGE AND ATTITUDES AMONG YOUTH</b>		
<b>VARIABLE<sup>†</sup></b>	<b>FEMALES</b>	<b>MALES</b>
<b>AGE AT MARRIAGE</b>	<b>Adjusted Odds Ratio<sup>‡</sup></b>	<b>Adjusted Odds Ratio</b>
<b>Knowledge of legal age at marriage for girls</b>		
Generalized Program Exposure	1.31*	1.90*
Individualized Program Exposure	1.78*	2.79*
<b>Ideal age at marriage for girls is 18 or older</b>		
Generalized Program Exposure	1.53*	1.21
Individualized Program Exposure	5.89*	2.30*
<b>REPRODUCTIVE HEALTH</b>		
<b>Knowledge of pills</b>		
Generalized Program Exposure	3.03*	1.98*
Individualized Program Exposure	6.32*	7.50*
<b>Knowledge of condoms</b>		
Generalized Program Exposure	2.43*	2.08*
Individualized Program Exposure	6.91*	5.31*
<b>Knowledge of source of pills</b>		
Generalized Program Exposure	2.41*	2.02*
Individualized Program Exposure	5.45*	7.11*
<b>Contraception should be available to married youth</b>		
Generalized Program Exposure	1.77*	4.05*
Individualized Program Exposure	4.34*	7.14*

\* p<.05

† Reference category for all variables: no program exposure

‡ Adjusted Odds Ratios have been adjusted for marital status, education, wealth, age and state

Depth of exposure also was important in shifting attitudes around contraceptive use. Females who participated in individualized interventions were more than twice as likely to think that contraception should be available to young married couples as those females who had only generalized exposure to DISHA. Typically, the individualized program effect seems to be twice as large as the generalized program effect, with odds ratio being 1.5 to 4 times higher.

### **Youth empowerment**

Increasing youth agency was seen as a crucial component that links knowledge and attitudes to behavior change. To increase overall agency related to sexual and reproductive health among youth, DISHA focused on four aspects of empowerment: self-efficacy, communication with elders, spousal communication and mobility. Though DISHA sought to increase youth empowerment among both young males and females, results here are presented only for females.

Bivariate analysis did not show clear trends in any of the four empowerment areas. Therefore, we focused on those outcomes that are closely related to two key life-of-project outcomes: age at marriage and contraceptive use. Individual items that measured communication, self-efficacy and mobility showed significant improvement. Unmarried females were more than twice as likely to report being able to talk to their parents about getting married at endline than at baseline (54 percent vs. 21 percent). These females also were more likely to feel that their opinions on marriage wishes were taken into consideration by their parents at endline compared to baseline (61 percent vs. 39 percent). For married females, spousal communication increased. Significantly more married females reported being able to talk to their husbands about contraception at endline (84 percent) than at baseline (65 percent). In another measure of empowerment—mobility—the proportion of females who reported being able to seek health services outside of the village unaccompanied increased by 52 percent for unmarried females and 59 percent for married females from baseline to endline (21 percent vs. 32 percent for unmarried females; 27 percent vs. 43 percent for married females).

The PSM results are more mixed. No program effect was seen around unmarried youths' ability to talk to their parents about their marriage wishes or their belief that their parents consider their marriage wishes. The program had only a small effect on married youth's ability to talk to their spouse about using contraception. A significant effect is seen, however, for female's mobility. Female youth who were exposed to DISHA were 60 percent more likely to be able to travel unaccompanied outside of the village to seek health services than matched females not exposed to DISHA. For some aspects of empowerment, such as communication and possibly mobility, it appears that depth of exposure was important in stimulating real change for females. Overall, however, depth of exposure did not seem to play a significant role in changing empowerment norms, highlighting the difficulty in shifting deeply entrenched norms, which often constrain girls. This suggests the need for testing and implementing more targeted interventions around females' empowerment (Table 5).



**TABLE 5:**

**EFFECT OF PROGRAM EXPOSURE ON EMPOWERMENT INDICATORS  
(MOBILITY AND COMMUNICATION) AMONG FEMALE YOUTH**

VARIABLE <sup>†</sup>	Adjusted Odds Ratio <sup>‡</sup>
<b>Able to talk to elders about timing of marriage<sup>§</sup></b>	
Generalized Program Exposure	1.00
Individualized Program Exposure	1.81*
<b>Feel elders consider their wishes on when to marry<sup>§</sup></b>	
Generalized Program Exposure	.824
Individualized Program Exposure	1.17
<b>Able to talk to spouse about using contraception<sup>†</sup></b>	
Generalized Program Exposure	1.45
Individualized Program Exposure	1.47
<b>Able to travel unaccompanied outside the village for health services</b>	
Generalized Program Exposure	1.65*
Individualized Program Exposure	1.66*

\* p<.05

† Reference category for all variables: no program exposure

‡ Adjusted Odds Ratios have been adjusted for marital status, education, wealth, age and state

§ Asked only to unmarried youth

† Asked only to married youth

**Livelihoods engagement**

The number of participants in livelihood activities was not large enough to undertake meaningful quantitative analysis. Therefore, findings below are from the project monitoring and qualitative data. Youth participants overwhelmingly valued the opportunity to acquire livelihood skills. Females in particular felt that having livelihoods skills increased their value—both in the home and in the larger community:

*Initially, they [the family] used to say that we will make a loss of our investment. But when they found that we are producing and earning, they have become silent. Rather, they are helping us, with the hope that we will do very good business.*

— (Female, CENCORED)

Data show that livelihoods skills led to a greater sense of empowerment in terms of how youth perceived themselves and their capacities, their ability to communicate and make decisions for themselves, and their freedom of movement inside and outside their village, which opened new doors for some girls:

*We can talk. Previously, we were scared to do anything.  
Now...we can go anywhere, do any work.*  
—(Female, AID)

Program participation and feedback demonstrated that despite traditional restrictions on girls’ movement and engagement in such activities, some families were willing to let their daughters take part. The importance of building skills and the potential for income generation seemed to contribute to a girl’s agency or her ability to articulate and act for herself.

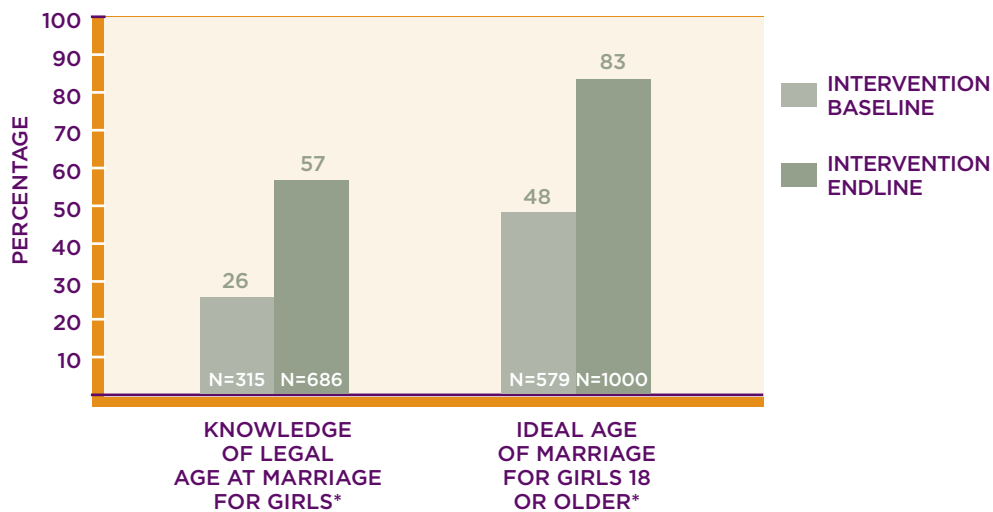
Program data show that out of the 676 youth that participated in livelihood activities, 473 (65 percent) launched new individual or group businesses. Examples range from one young woman who established a profitable tailoring shop to a group-run *lac* bangle-making business. This is a promising beginning, but the short duration of the project does not provide a sense of how sustainable these ventures are and whether youth will be able to continuously seek affordable raw materials, secure capital, find new markets and make a profit in these economically limited states.

## 2. Community-level Outcomes

Data also demonstrate significant improvement in outcomes of interest at the community level. Adult knowledge and attitudes regarding girls’ age at marriage improved substantially from baseline to endline. Knowledge of 18 as the legal age at marriage for girls in India doubled. At endline adults were 73 percent more likely than at baseline to feel that girls should wait until they are 18 or older to be married (Figure 5).

FIGURE 5:

### ADULT KNOWLEDGE AND ATTITUDES AROUND EARLY MARRIAGE, BASELINE AND ENDLINE



\* p<.05

Program effects around female age at marriage were significant though varied in scale with respect to knowledge and attitudes. For example, adults who were exposed to DISHA were 27 percent more likely to know the legal age at marriage for girls and 7 percent more likely to feel that girls should wait until they are 18 or older to marry compared to adults who were not exposed to DISHA.

With regard to youth access to sexual and reproductive health information and services, adult views were conservative at baseline. Only 45 percent of adults in Jharkhand felt that girls or boys ages 14-15 years should have access to contraceptive information. In Bihar, attitudes were even more conservative, with less than a quarter of adults believing that contraceptive information should be available to either boys or girls. In Bihar, adult attitudes on this issue improved significantly by endline, with an increase of 20 percent who believe contraceptive information should be available to both girls and boys. In Jharkhand, improvements were significant but less striking, with adults about 10 percent more likely at endline than baseline to approve of girls and boys ages 14-15 having access to contraceptive information. It is noteworthy that even with these improvements, by endline more than a third of adults still disapproved of making contraceptive information available to boys and girls at ages 14-15.

Despite these attitudes, change was seen and significant program effects were observed. Adults who were exposed to DISHA were 1.5 times more likely to think that girls and boys should have access to contraceptive information than matched adults who were not exposed to DISHA, providing evidence that DISHA activities were responsible for some of the shifts seen from baseline to endline.

In-depth participation in DISHA activities at the individual level appears to have a greater impact on adult attitudes around early marriage and access to contraceptives than participation in village-level activities only. Adults who participated in individualized intervention activities were almost two and a half times as likely to believe that girls should be at least 18 when they are married compared to those who were not exposed to DISHA. Those adults who experienced generalized exposure were only 1.5 times as likely to agree girls should be 18 or older at marriage. Further, individualized exposure meant that adults were almost three times as likely to believe that contraception should be available to married couples compared to those with no exposure. However, even generalized exposure meant that adults were twice as likely to have supportive attitudes about contraception for young people when compared to those with no exposure (Table 6).

DISHA evaluation findings also show largely positive results with respect to adult attitudes about youth life options. The proportion of adults who felt that girls should be able to attend school outside of their village increased from baseline to endline (71 percent vs. 80 percent). Further, almost 70 percent of adults at endline believed it was acceptable for girls to engage in livelihood activities. PSM showed significant program effects for both of these outcomes, indicating that some of the shifts in adult attitudes may be attributable to DISHA. Specifically, adults who were exposed to DISHA were 12 percent more likely than matched adults not exposed to DISHA to believe that girls should be able to go away to school, and were 27 percent more likely to feel that it is acceptable for girls to engage in livelihood activities.

TABLE 6:

**EFFECT OF PROGRAM EXPOSURE ON EARLY MARRIAGE  
AND CONTRACEPTION ATTITUDES AMONG ADULTS**

VARIABLE <sup>†</sup>	Adjusted Odds Ratio <sup>‡</sup>
<b>AGE AT MARRIAGE</b>	
<b>Knowledge of legal age at marriage for girls</b>	
Generalized Program Exposure	1.87*
Individualized Program Exposure	1.77*
<b>Ideal age at marriage for girls is 18 or older</b>	
Generalized Program Exposure	1.51*
Individualized Program Exposure	2.33*
<b>REPRODUCTIVE HEALTH</b>	
<b>Contraceptive information should be available to young boys ages 14-15 years</b>	
Generalized Program Exposure	1.79*
Individualized Program Exposure	3.48*
<b>Contraceptive information should be available to young girls ages 14-15 years</b>	
Generalized Program Exposure	2.01*
Individualized Program Exposure	3.33*
<b>Contraception should be available for young married couples</b>	
Generalized Program Exposure	2.04*
Individualized Program Exposure	2.98*

\* p&lt;.05

† Reference category for all variables: no program exposure

‡ Adjusted Odds Ratios have been adjusted for sex, education and state

### 3. Provider-level Results

Feedback from youth FGD participants indicated that peer educators, youth depot holders and health service providers improved their access to sexual and reproductive health information:

*We ask a peer educator. Nowadays, information is available in villages.*

— (Female youth, Bihar)

Project data, however, did not show an uptake of sexual and reproductive health services from the resources created by DISHA. Quantitative endline and program monitoring data both indicated that few youth sought services from YDHs. Due to small sub-group sizes, it is difficult to draw firm conclusions about the youth-friendly service providers. However, because these components were implemented relatively late in the project, it is possible that the quantitative findings do not yet capture their full impact.

Despite the lack of clear quantitative evidence, feedback from peer educators and health service providers suggests that some awareness and use of DISHA-related providers had begun. As one service provider in Bihar noted:

*Married people used to come alone and not in pairs. And now unmarried also come. Due to DISHA, now everyone knows us.*

Overall, strong improvements in youth knowledge and attitudes support the conclusion that DISHA did increase access to sexual and reproductive health information through community-based activities and peer educators. Young people seemed to value and use these resources for information, although not for services. By building youth capacities and skills, DISHA may have triggered increased use of contraceptives and other sexual and reproductive health services, but these services were not accessed through the project's resources.

#### **4. Life of Project Impact on Youth Behaviors**

DISHA was developed with the premise that overall changes in youth agency, supportive environments and access to reproductive health services will, in turn, lead to changes in important youth life decisions and behavior, such as age at marriage and contraceptive use. The life of project impact outcomes indicate that strong changes in knowledge and attitudes among youth and adults during the DISHA program did translate into behavior change. DISHA was most successful in creating behavior change among individual and community driven outcomes such as age at marriage and contraceptive use. Behavior change around outcomes that required fundamental improvements in infrastructure or shifts in economic or political policies to be successful, such as livelihood opportunities (which need a supportive economic environment) and safe delivery service provision (which needs strong, widespread health infrastructure) were much harder to achieve.

##### **Age at marriage**

At baseline, more than 50 percent of girls in our sample were married in the two years prior to the start of DISHA, and almost 60 percent of these girls were married before age 18. Among those who were married in the two years prior to the baseline survey, the mean age at marriage was 15.9 years. In the endline sample, 198 girls married during the life of the DISHA program, only 40 percent of whom were younger than 18. The average age at marriage also increased by nearly two years to 17.8 years.

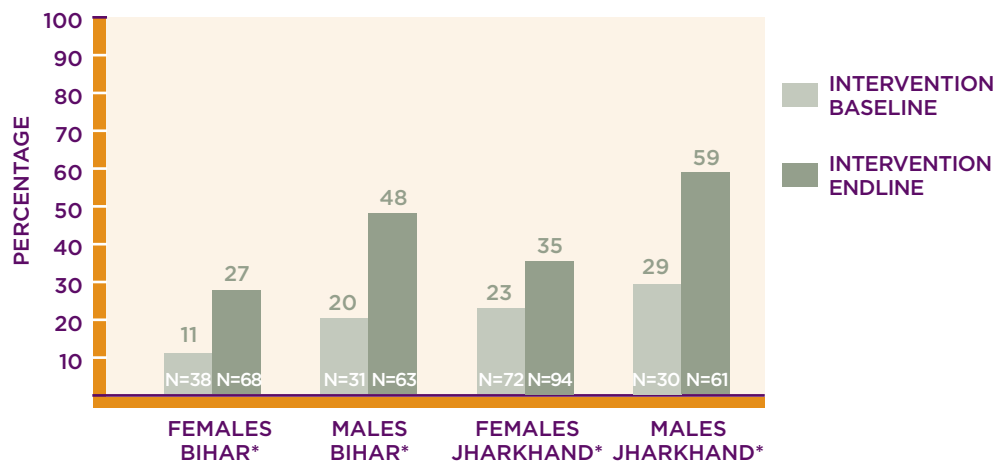
Though a significant program effect was not found, it is difficult to measure the full impact of DISHA on this outcome because many girls who participated in DISHA activities have yet to be married. However, the upward trend in age at marriage among girls who did marry during the life of the program, along with youth and adult changes in knowledge and attitudes that can be attributed to DISHA programming, provides evidence for a growing awareness and acceptance of delaying marriage in the project communities.

##### **Contraceptive prevalence and use of sexual and reproductive health services among youth**

Increasing contraceptive prevalence (including supply, access, and use by youth) was a cornerstone of DISHA. Reported current use of a method of contraception among young married couples increased significantly among both females and males

FIGURE 6:

**CURRENT USE OF A MODERN CONTRACEPTIVE AMONG MARRIED YOUTH, BASELINE AND ENDLINE**



\* p<.05

in Bihar and Jharkhand from baseline to endline. The changes in Bihar were most striking. Reported current use more than doubled among both males and females (Figure 6).

Program effects were significant for increased contraceptive use. Married youth exposed to DISHA were almost 60 percent more likely than similar youth who were not exposed to DISHA to report current use of a modern contraceptive method, providing evidence that increases in contraceptive use in married populations in the program areas is partly attributable to DISHA interventions. Thus, while contraceptive use has gone up in these areas of Bihar and Jharkhand overall during the time period of the project, it has gone up significantly more for young married men and women who were exposed to DISHA.

Interestingly, the intensity of program exposure does not seem to make as much difference on young people’s use of contraception as has been the case for attitudes and knowledge. As Table 7 shows, the odds ratio for current contraceptive use shows no difference at all for married males by level of program exposure.

TABLE 7:

**EFFECT OF PROGRAM EXPOSURE ON CONTRACEPTIVE PREVALENCE AMONG MARRIED YOUTH**

VARIABLE <sup>†</sup>	FEMALES Adjusted Odds Ratio <sup>‡</sup>	MALES Adjusted Odds Ratio
<b>Current use of any modern method</b>		
Generalized Program Exposure	1.76*	1.77
Individualized Program Exposure	2.10*	1.75

\* p<.05

† Reference category for all variables: no program exposure

‡ Adjusted Odds Ratios have been adjusted for education, wealth, age and state

For married females, the effect is larger for the individualized as opposed to generalized exposure, although the difference in odds ratios is not great. This is an unexpected finding and suggests that intensive interventions may not be necessary for contraceptive adoption, or at best the marginal returns of individualized interventions are fairly small for this type of behavioral change in this setting.

Results for pregnancy-related outcomes are less encouraging. Few changes were seen in uptake of antenatal care (ANC) or delivery services. At baseline, 58 percent of females reported having any ANC visits prior to giving birth to a child born in the two years prior to the survey. This increased only slightly to two-thirds of females who gave birth during the lifetime of the program. Though this increase in care is encouraging, corresponding increases in the number of ANC visits (the World Health Organization recommends three visits) were not seen. Similar results were found among pregnancy delivery services. At baseline, only 40 percent of females with a child born in the last two years reported having a trained professional help deliver the child. This increased only slightly to 46 percent among females who reported giving birth during the life of the program. Significant program effects were not observed for any safe-delivery outcomes when comparing females who were exposed to DISHA to similar females who were not. These findings suggest that in these poor, rural communities, the lack of public health infrastructure and the logistics of traveling to a health facility for an ANC visit—let alone to deliver—remain a major barrier for young women.

### **5. Institutional-level Results**

Strengthening local institutional capacity for and commitment to youth sexual and reproductive health programmatic efforts within Bihar and Jharkhand was central to ensuring that DISHA efforts were implemented well and could be sustained over time. To understand the impact of capacity-building efforts, ICRW reviewed multiple training and monitoring reports to assess NGO baseline and endline capacity for each key area. The six implementing NGOs were assessed along a five-point scale that ranged from 1 (no capacity) to 5 (full capacity) as required for an integrated youth program like DISHA.

Table 8 summarizes the results for NGO capacity building, showing the average capacity levels at baseline and endline, as well as the number of NGOs that demonstrated sufficient capacity at baseline and endline (a score of 4.5 or higher).

In general, few NGOs began DISHA with the capacity needed to implement the full program. Baseline capacity was particularly low in technical areas such as livelihoods and youth-friendly services, as well as evaluation skills. With input from ICRW and other resources, most NGOs showed improvements across all areas. Three or four of the NGOs consistently met ICRW's basic standards by the end of the project.

With regard to youth sexual and reproductive health, partner NGOs had previous experience implementing such activities, and, therefore, moderate capacity building efforts resulted in high-level technical capacity for most organizations. In other technical areas—particularly livelihoods and youth-friendly service provision—NGOs made significant progress, but most did not demonstrate sufficient capacity at endline. The majority of NGOs could plan and develop activities using an

TABLE 8:

**CHANGES IN NONGOVERNMENTAL ORGANIZATION CAPACITY**

<b>NGO CAPACITY BUILDING</b>	<b>AVG. BASELINE</b> Score (1-5)	<b># OF NGOS</b> at capacity at baseline	<b>AVG. ENDLINE</b> Score (1-5)	<b># OF NGOS</b> at capacity at endline
<b>Technical Capacity</b>				
Youth sexual and reproductive health	3.6	1	4.6	4
Livelihoods	2.8	0	3.8	1
Community mobilization	3.7	1	4.4	4
Youth-friendly health svcs.	2.3	0	3.7	1
<b>Monitoring and Evaluation</b>				
Program monitoring	3.3	0	4.0	3
Quality assurance	3.5	0	4.4	3
Impact evaluation	1.9	0	3.8	1
<b>Networking</b>	<b>3.8</b>	<b>1</b>	<b>4.3</b>	<b>4</b>
<b>Fundraising</b>	<b>3.9</b>	<b>2</b>	<b>4.6</b>	<b>5</b>
<b>Operational Systems</b>	<b>3.5</b>	<b>0</b>	<b>4.5</b>	<b>3</b>
<b>Project Implementation</b>	<b>3.6</b>	<b>1</b>	<b>4.3</b>	<b>3</b>

entrepreneurial, market-based framework, but they were not always able to fully execute activities and address challenges. This may reflect more on the overall setting of the project—with limited health care infrastructure and economic opportunities—than on the NGOs.

Through DISHA, ICRW introduced organizations to monitoring and evaluations (M&E) tools that allowed them to continually reflect and focus on project effectiveness and quality. This enabled them to take the lead in project monitoring, with ICRW maintaining broad oversight through biannual assessments. However, despite considerable training in evaluation techniques such as survey implementation, conducting FGDs and reporting qualitative results, only one NGO at endline demonstrated good capacity. While NGOs valued having the opportunity to acquire these skills and have ownership over evaluation activities, this required intensive input from ICRW and, given the results, may not have been an appropriate focus area.

Basic project implementation and management capacity—from staffing to planning to reporting—were needs that emerged at the start of the project and were added to the capacity-building component. NGOs generally made important strides in these areas, although results sometimes fluctuated due to shifts in leadership commitment or staff turnover.



One area of capacity building where DISHA was particularly successful was proposal development training. All of the NGO partners submitted proposals on youth sexual and reproductive health to various donors, most of which were funded. By the end of DISHA, NGO partners had submitted more than 20 proposals for youth sexual and reproductive health and/or integrated programs (including livelihoods), of which at least 13 were funded.

It is important to highlight another area of ICRW input that underlined all work with the NGO partners. From the outset of the project, ICRW spent considerable time with NGO staff to address their own attitudes towards youth—both in terms of youth needs and rights when it comes to sexual and reproductive health issues, as well as the potential of youth to be resources and partners in implementing DISHA activities. This input proved crucial to the overall success of the project.

## **CONCLUSIONS AND RECOMMENDATIONS**

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The Development Initiative Supporting Healthy Adolescents (DISHA), which began its planning phase in 1999, was one of the first large-scale integrated programs in India to address the broader context of young people's sexual and reproductive health needs. The program provided youth with sexual and reproductive health information and services while also tackling the social constraints that often limit their choices and actions.

Based on the DISHA experience and evaluation, we've learned that an integrated approach to improving youth's sexual and reproductive health holds both potential and promise. DISHA successfully shifted youth and adult knowledge and attitudes around early marriage and reproductive health. The program was somewhat successful in changing norms around certain dimensions of empowerment, primarily spousal communication, self-efficacy within the context of marriage and mobility; other empowerment measures such as communication with elders and self-efficacy prior to marriage were not as robust. And the project increased youth awareness of and access to reproductive health services, though youth have not yet tapped the project's expanded provider base.

The results also demonstrate significant behavior change in DISHA communities, even with the relatively short duration and challenging setting of the project. DISHA was most successful in improving behaviors that relied largely on individual or community action, as shown through increases in age at marriage and significant increases in contraceptive use among married youth. Behavior change that depended on external factors such as infrastructure and the political or economic environment were more difficult to achieve.

Moreover, DISHA's intensive work with NGO partners has resulted in increased local capacity to implement complex youth programs.

Overall, these results show that DISHA has had a notable measure of success in improving key outcomes at the youth, community, service provider and institutional

levels, which, in turn, has laid the groundwork for longer-term sustainability. These insights and lessons learned provide important evidence for future youth programming and are presented with recommendations below.

### **1. DISHA's integrated program has improved key sexual and reproductive health outcomes.**

The DISHA experience shows that, even in challenging settings and in a short time, integrated programs can be implemented and result in positive change. This programming model addressed youth needs for sexual and reproductive health information and services while accounting for their broader social and economic environment. In particular, it was successful in helping young people better meet their sexual and reproductive health needs through improved knowledge, attitudes and behaviors.

**Recommendation:** Invest in implementing and evaluating different integrated programs to improve youth sexual and reproductive health outcomes. Tailor programs to address the broader context of youth sexual and reproductive health needs.

### **2. Integrated programs present significant implementation challenges.**

Integrated programs are challenging to implement, especially in environments with limited economic options, health infrastructure and NGO capacity. In Bihar and Jharkhand, lack of options and infrastructure particularly constrained DISHA's efforts to roll out the livelihoods intervention and strengthen sexual and reproductive health service delivery. Limited NGO experience and capacity was another considerable challenge.

**Recommendation:** Integrated youth programs may be best implemented in settings with adequate levels of infrastructure, economic opportunities and implementation capacity. In less than ideal settings, it may be more feasible to strategically select program components, implementing the most promising and viable interventions of the full integrated model.

### **3. More intensive, individualized intervention activities generally yield better results, though community-level activities also can lead to improved sexual and reproductive health outcomes.**

DISHA demonstrated that in general, young people and adults who participated in more individualized, frequent and interactive program activities had significantly stronger sexual and reproductive health outcomes than those who participated in more generalized, community-based activities. Interestingly, this result-link with intensive, individualized activities was more common among attitudinal measures than behavior measures.

That said, young people also responded to community-level activities, which sometimes yielded results nearly as impressive as the more individualized activities. For example, young women and girls with more intensive DISHA exposure were only slightly more likely to report contraceptive use—a key behavioral outcome—than those who participated in the more generalized community interventions.

This pattern suggests that in communities where basic sexual and reproductive health-related knowledge, attitudes, empowerment and behaviors are quite poor, even broad, community-level interventions may reach young people who may be contemplating behavior change. More intensive efforts may be needed to move youth along the behavior change continuum by first changing entrenched attitudes.

**Recommendation:** Where resources are available, activities that allow intensive interaction with youth and communities on attitudinal and empowerment issues are worth undertaking for more comprehensive change. Where infrastructure and resources are poor, broader community activities may be a cost-effective tool for meeting a number of sexual and reproductive health needs at scale, especially where sexual and reproductive health levels are low.

#### **4. The sequencing and duration of program interventions affect the success of integrated programs.**

Programs like DISHA that aim to change entrenched social norms and create new opportunities for youth need time to take root and require attention to the sequencing of implementation. For DISHA, infrastructure and capacity limitations meant that components of the program that were most suited to the Bihar and Jharkhand context and NGO capacity—community mobilization and sexual and reproductive health knowledge and information—could be rolled out quickly and implemented for the desired length of time. In contrast, components that relied on infrastructure and capacity—livelihoods and services—could only be implemented sequentially, cutting short their overall implementation period.

**Recommendation:** Given the multiple components of integrated interventions, it is important to have a sound approach that aligns capacity building and intervention roll-out and allows sufficient time for all the integrated components to be operational in the field. It may be necessary to start some components well before the full implementation period to ensure that “supply” is in place as “demand” is generated.

#### **5. Youth are an important resource in defining and meeting their own sexual and reproductive health needs.**

DISHA's approach to increasing access to sexual and reproductive health information and services was heavily driven by youth who provided a knowledge base, identified suitable providers and served as resources for their peers. While services such as antenatal care and obstetric delivery can be given only by trained providers with appropriate facilities, a significant number of youth needs, such as access to accurate information, lend themselves easily and most naturally to young people providing the services themselves. For other needs not best met by youth, creative alternatives need to be explored and given time to take hold, such as the private health service providers and youth depot holders. Village-based peer ventures also could benefit from stronger linkages with government and/or private sector social marketing projects.

**Recommendation:** Youth are an important resource and need to be recognized by communities, NGOs, governments and young people as partners in designing, implementing and potentially sustaining select sexual and reproductive health

interventions, particularly in settings where other resources are limited. For other interventions, a better understanding of youth needs and potential, as well as effective linkages with government and private sector providers for select services, can provide an innovative, cost-effective and sustainable route to meeting youth sexual and reproductive health needs.

**6. A core set of technical capacities and organizational principles are essential for implementing and sustaining integrated programming over the long term.**

While core technical competencies—such as sexual and reproductive health, livelihoods and project monitoring—were necessary for the successful implementation of DISHA activities by partner NGOs, certain organizational features were equally important. NGOs that viewed communities as true partners and owners of a particular issue/activity had stronger execution. It was also important for NGO staff to have positive attitudes toward youth in terms of the sexual and reproductive health needs and rights as well as their potential as program resources. Active on-the-ground networks helped pave the way for addressing sensitive sexual and reproductive health issues and provided some structure on which to build DISHA activities (e.g., using women’s groups as an access point for DISHA). The combination of innate NGO strengths, supplemented by capacity building in key areas, is likely to help ensure the long-term viability of youth sexual and reproductive health efforts in Bihar and Jharkhand.

**Recommendation:** Given the importance of NGO partners for long-term sustainability of youth sexual and reproductive health programs, strengthening their technical capacities and commitment to core principles is a worthwhile investment. While capacity building need not be exhaustive, a minimum standard—in terms of relevant technical skills, as well as basic financial, staffing, management and monitoring systems—should be met.

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