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| South Asia Water Security Initiative (SAWASI) |
| Mid-term Review |
| July 2024 |

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| **FH Designs Pty Ltd**  Dr Paul Crawford  Dr Naomi Francis  Dr Manoj Nath  Ms Shagufta Jeelani |



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# Investment summary

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| Investment Name | South Asia Water Security Initiative (SAWASI) |
| AidWorks investment number | INN302 |
| Commencement date | 1 Jul 2019 |
| Completion date | 31 Dec 2025 |
| Total Australian dollars | **AUD20,000,000** |
| Implementing Partner(s) | World Resources Institute India (WRI-I)  World Wide Fund for Nature Pakistan (WWF-P)  Arup Australia Pty Ltd  Adam Smith International Pty Ltd (ASI)  Alluvium International Pty Ltd  Oxford Policy Management (OPM) |
| Country/Region | India, Pakistan, Nepal |
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DFAT staff at posts were key to arranging fieldwork and access to relevant information[[1]](#footnote-2). Staff and advisers in implementing organisations were instrumental in facilitating field visits in New Delhi, Islamabad, Rawalpindi and Lahore and were universally constructive in their engagement in the review.

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# Table of acronyms

AHC Australian High Commission

AIWASI Australia India Water Security Initiative

APWASI Australia Pakistan Water Security Initiative

ASI Adam Smith International

AUD Australian Dollars

CDP Community Demonstration Project

CRC Cooperative Research Centre

DFAT Department of Foreign Affairs and Trade

DWF Delhi Water Forum

EOPO End-of-Program Outcome

FGD Focus Group Discussions

GEDSI Gender Equality, Disability and Social Inclusion

HUD&PHED Housing, Urban Development and Public Health Engineering Department

KEQ Key Evaluation Question

M&E Monitoring and Evaluation

MEL Monitoring, Evaluation and Learning

MoHUA Ministry of Housing and Urban Affairs

MoU Memorandum of Understanding

MTR Mid-term Review

OPM Oxford Policy Management

PLWD People Living with Disability

SAWASI South Asia Water Security Initiative

SDIP Sustainable Development Investment Portfolio

SDV South and Central Asia Development Section

TA Technical Adviser /Technical Assistance

TAG Technical Advisory Group

ToR Terms of Reference

WECS Water & Energy Commission Secretariat

WRI World Resources Institute

WSC Water Sensitive Cities

WWF World Wide Fund for Nature

# Executive summary

**Background**

This document is a mid-term review (MTR) of the *South Asia Water Security Initiative* (SAWASI). SAWASI was established as a four-year (2021 – 2025) program (AUD20,858,922.60) with the goal “*to improve access to safe water and sanitation services for disadvantaged communities in South Asian cities*” (specifically in India, Pakistan and Nepal[[2]](#footnote-3)). The program aimed to emphasise water security, city-level governance and climate resilience by adopting Australia’s Water Sensitive Cities (WSC) approach. The clear intent was that three components (aligned to each of three end-of-program outcomes (EOPO)) would be integrated in order to achieve impact (broadly conceived as replication and/or scale-up of successful WSC-related interventions):

* **Community Demonstration Projects (CDP)** would downscale WSC concepts within four disadvantaged communities to operationalise various social/governance and technical interventions aimed at improving water and sanitation security at household level and contribute to climate resilience.
* **Technical advisors (TA)** positioned within key counterpart institutions would advocate for city-wide water and sanitation planning, facilitate the engagement of counterparts in CDP progress and position the institutions for replication or scale-up of successful interventions towards WSC status.
* **Learning processes** facilitated at community, city, national and regional levels would strengthen implementation of CDPs and TA, provide technical support for contextualising WSC approaches, and mobilise replication and scale-up.

All of this was expected both to draw on, and showcase, Australia’s expertise in urban water and sanitation, thereby cementing bilateral relationships at technical and political levels, creating further opportunities for trade and development partnerships.

**Overall Assessment**

A key finding of this MTR is that this integrated concept has not been borne out in reality.In practice, SAWASI has been a multi-country (India, Pakistan and Nepal) funding mechanism administered by DFAT’s South and Central Asia Development (SDV) Section and managed by Australia’s High Commissions (AHC) in the partner countries. While capable and committed people in Canberra and in the partner countries have worked hard and achieved good results, these results are localised. Rather than being an integrated regional program, SAWASI is a portfolio of five discrete projects implemented in three South Asian countries, unified loosely by variable application of WSC concepts, and supported by one regional workshop.

Notwithstanding evident shortcomings with the design and implementation of the regional modality, programming in each country has been relevant to local needs and priorities and broadly aligned with Australia’s policy settings. Implementation of the discrete projects has been well regarded by counterparts and beneficiaries.

**EOPO 1: “By 2025, four disadvantaged communities in South Asian cities have transitioned towards WSC”**

EOPO 1 concerns the implementation of CDPs in India and Pakistan (but not Nepal). The APWASI CDP (Pakistan) is considered on track to complete the scope of work by June 2025. The AIWASI CDP (India) is estimated to be up to 18 months behind schedule. In both India and Pakistan, the CDPs have responded to community needs because of detailed research with community members by the consortia. In Pakistan, the infrastructure provided by the program (e.g. disability-accessible park, rainwater harvesting (RWH) systems and water filtration systems) are highly regarded by residents. The scale-up of CDP infrastructure is dependent on government bodies and service providers and there is evidence this is happening in Pakistan already. In both countries, the CDP has established city-level governance bodies which bring together actors in the water and sanitation sector that have previously been siloed. This mechanism could be critical to the sustainability of the benefits gained by the CDP. The CDP has fostered the empowerment of women to participate meaningfully in community-level management. For example, in India, women representatives of the Community Action Groups are independently advocating for their needs for water tankers, street lighting etc. with local service providers.

Arguably, the emerging challenge for both CDPs relates less to completing the technical scope of work, and more to the future impact and sustainability of successful interventions. Appropriate focus must be given to the ‘mechanics’ of replication and scale-up. Global experience confirms that replication/scale-up rarely happens organically, but rather demands strategic design, dedicated resources, technical insight, political and advocacy skills. This finding should not suggest that nothing has been done to position for replication/scale-up. The MTR team heard clear interest from city officials in both Delhi and Islamabad about replicating project interventions, as a starting point.

From a technical standpoint, while it is irregular to elevate a specific technical approach (WSC) to EOPO level, this has been less of an issue in practice than the phrasing of the EOPO, which is unattainable during the life of this investment. Most interviewees confirmed the broad relevance of WSC concepts in target countries—though many understood the concepts to be drawn more generally from sustainable resource management, preferring the term ‘Climate Smart Cities’. Although WSC was developed for city-wide application, most people involved directly with CDP implementation found that the concepts could be readily downscaled in the four target communities.

**EOPO 3: “Local, state and/or national government officials TA needs met and have a positive attitude towards partnership with Australian urban water experts”**

EOPO 3 concerns the provision of TA in India, Pakistan and Nepal. A key finding of this MTR is that the TA investments have each delivered important and potentially strategic results in their respective contexts, but collectively have not contributed to the wider intent of the SAWASI regional modality. In all three countries, work delivered by the TA was relevant and well targeted insofar as it met the stated needs and priorities of partner governments. The TA has been highly responsive to the needs of the Pakistan and India governments whilst also supporting the priorities of the Australian government regarding sharing technical water and sanitation expertise. In Pakistan, the TA successfully responded to the demand for a hydrological model to help manage critical flooding issues in Lahore. The TA in Nepal is similar to Pakistan in that they are supporting the Water and Energy Commission Secretariat (WECS), Pokhara and Tulsipar, to develop a hydrological model that can be independently used by government counterparts to manage flooding issues. In India, the TA supports an Additional Secretary and several directors with responsive and high-quality advice aligned with the key performance indicators of their water, sanitation and urban reform scheme (AMRUT 2.0).

The SAWASI concept anticipated that TA delivered in counterpart agencies/departments and the CDPs would be aligned, and in combination, the components would foster progress towards WSC status. Within this conception, the TA would provide a city-wide policy context for WSC, creating relevance for replication/scale-up. However, in practice, the TA in each of the three countries has not explicitly promoted WSC approaches, and implementation has been discrete (with little or no reference to the SAWASI intent). Further, in India and Pakistan, TA has been implemented independently of the CDPs. Better integration of TA and CDP is a recommendation of the MTR; indeed the MTR team heard unprompted interest from strategic TA counterparts (in both India and Pakistan) in learning more about community-level water and sanitation innovations.

EOPO 3 draws explicit focus on promoting Australian urban water expertise, which creates subtle tensions from a development standpoint in relation to DFAT’s locally-led development policy. However, from a trade and diplomacy standpoint, the promotion of Australia’s capability in the water sector makes sense. Striking a balance remains DFAT’s perennial challenge. Whilst counterparts valued having direct access to information about international best practice through the TA, there was no specific valuing of Australia *per se*); and is arguably only peripherally related to promoting WSC approaches.

**EOPO 2: “Improved knowledge amongst workshop attendees of water sensitive cities approach”**

EOPO 2 concerns the facilitation of learning and knowledge exchange about WSC in South Asia. Arguably, EOPO 2 is the key mechanism for promoting coherence and integration across the regional investment—spelled out in the SAWASI design. A regional workshop was convened in Bangkok in August 2023. The workshop involved 46 participants over 3 days, with presentations by project teams. Most participants found value in the workshop, which implicitly focussed on an ‘*intra-program learning*’ rationale (with an internal focus on exchange and improving program delivery) rather than an ‘*extra-program learning*’ rationale (focussed on engaging key change agents for the purpose of disseminating innovations and promoting reform). This was a legitimate emphasis—especially if the COVID-19 restrictions had allowed scheduling early in implementation—however, the value of this approach was diminished by the fact that no mechanism was established to foster ongoing collaboration between implementing partners or Australian experts. This finding should not be taken as criticism of the workshop facilitators or planners *per se*—noting that it was well run and attracted predominantly positive feedback. Rather, the core issue is the fundamental disconnect that evolved between the SAWASI design and the subsequent rollout of discrete investments across three countries which eroded the purpose of a regional workshop.

The MTR team was advised that a second regional workshop is currently being planned. In light of the above finding, the MTR found that there may be greater value-for-money in instead mobilising a small team of respected and relevant specialists to each of the countries, comprising, for example, an urban water and sanitation specialist, a sector GEDSI specialist and a sustainability or knowledge management specialist. This group could be deployed to spend appropriate days with each of the five SAWASI project teams/counterparts critiquing approaches and providing targeted technical advice. The focus of such a mission would be on positioning for replication/scale-up in order to maximise impact and value-for money. If sufficiently senior specialists can be recruited, the visit may also provide the AHCs with a public diplomacy opportunity to engage with senior counterparts, enabling further promotion of replication/scale-up.

**DFAT management and governance**

The ‘program’ has been administered from Canberra by SDV—a section also responsible for other development activities across South Asia. SDV is resourced with 1.5 FTE staff, overseen by a director. These staff are obliged to engage routinely with the three DFAT Posts (Delhi, Islamabad and Kathmandu) in order to manage six implementation contracts (directly or indirectly spanning 12 separate implementing partners). This represents a substantial workload for a small team, compounded by poorly conceived Service Orders. This arrangement arose from a recommendation in the final evaluation of the predecessor program (SDIP) that advisers/contractors could be involved with technical implementation but should not play a role in management or governance. In retrospect, although well-intentioned, this recommendation appears misguided in circumstances where the Department is constrained in providing sufficient management and technical staff for direct oversight of an ambitious regional program. This finding is not a criticism of DFAT staff currently involved in Canberra or at the Posts. To the contrary, the MTR team witnessed highly committed and capable staff working to achieve good results. Rather, this presents lessons for future designs of this nature, and the critical importance of strategic management and governance arrangements.

**Program-wide MEL**

The engagement of OPM as an independent/stand-alone MEL provider—separate from implementers, donor and counterparts—was aligned with international good practice in relation to independence/contestability. However, in reality, the arrangements have been problematic for several reasons: (I) the fact that discrete projects are managed/implemented in each country with limited commonality erodes the value of an overall M&E provider; (II) contractual arrangements do not give OPM any authority to specify MEL activities by implementing partners—meaning they can *advise* but not *prescribe* MEL protocols or methods—which has created an inability to draw comparisons across the program; (III) the fact that (until recently) OPM was not resourced to collect primary data meant that they were positioned to *collate* rather than *synthesise*, which in turn created frustration about a lack of primary analysis. Overall, the MTR formed the view that the MEL arrangements are not currently fit-for-purpose, and indeed have been a case of mutual frustration for all parties, including OPM staff.

# Consolidated recommendations

[1. DFAT should consider negotiating a no-cost-extension with the WRI (India) consortium to enable completion of the CDP scope and to position for replication/scale-up with counterparts. 11](#_Toc176976919)

[2. WRI (India) and WWF (Pakistan) should prioritise positioning of successful CDP interventions for replication and/or scale-up by relevant counterparts, including through engaging professional knowledge product and policy advocacy capability. 11](#_Toc176976920)

[3. The AHCs in India and Pakistan should proactively seek out public diplomacy and policy influence opportunities in support of CDP replication and scale-up by government counterparts. 11](#_Toc176976921)

[4. DFAT should rephrase EOPO 1 to reflect an explicit contribution to climate resilient cities in support of streamlined international climate finance reporting. 12](#_Toc176976922)

[5. AHCs in India and Pakistan should utilise the CDP scale-up advocacy as an opportunity for access and influence with strategic counterparts associated with TA projects, noting the critical issue of water and sanitation for both federal governments, and Australia’s accepted expertise in the sector. 15](#_Toc176976923)

[6. DFAT should reconsider the format of a second regional workshop in favour of in-country project consultations by technical specialists. However, if a regional workshop is to go ahead, DFAT should ensure that participants are consulted well ahead about their priorities for the workshop. 18](#_Toc176976924)

[7. AHCs should take over responsibility for program administration from SDV in recognition that SAWASI is in practice a portfolio of bilateral projects, thereby improving efficiency. 20](#_Toc176976925)

[8. SDV should consider reprioritising the program-wide MEL budget to rationalise implementing partner reporting to AHCs in director support of FIMR reporting, knowledge product development and policy advocacy. 21](#_Toc176976926)

# Introduction

## Synopsis

This document is a mid-term review (MTR) of the *South Asia Water Security Initiative* (SAWASI)—an investment by Australia’s Department of Foreign Affairs and Trade (DFAT). A MTR was a requirement of the Deed and the monitoring, evaluation and learning (MEL) arrangements. The review was undertaken by four independent evaluators[[3]](#footnote-4) (FH Designs Pty Ltd) during April – June 2024 in line with a Terms of Reference (ToR) developed by DFAT and with reference to DFAT’s M&E Standard 9[[4]](#footnote-5) and Ethical Research and Evaluation Guidance[[5]](#footnote-6).

## Investment overview

SAWASI was established as a four-year (2021 – 2025) program (AUD20,858,922.60) with the goal “*to improve access to safe water and sanitation services for disadvantaged communities in South Asian cities*” (specifically in India, Pakistan and Nepal[[6]](#footnote-7)). The program aims to emphasise water security, city-level governance and climate resilience by adopting Australia’s Water Sensitive Cities (WSC) approach[[7]](#footnote-8). SAWASI is implemented in the strategic context of the Memorandum of Understanding (MoU) on Water Cooperation that Australia has with South Asian countries.

SAWASI is pursuing three end-of-program outcomes (EOPO):

1. By 2025 four disadvantaged communities in South Asian cities have transitioned towards WSC.
2. Improved knowledge amongst workshop attendees of WSC approach.
3. Local, state and/or national government officials technical assistance (TA) needs met and have a positive attitude towards partnerships with Australian urban water experts.

**EXPLAINER: The WSC Approach**

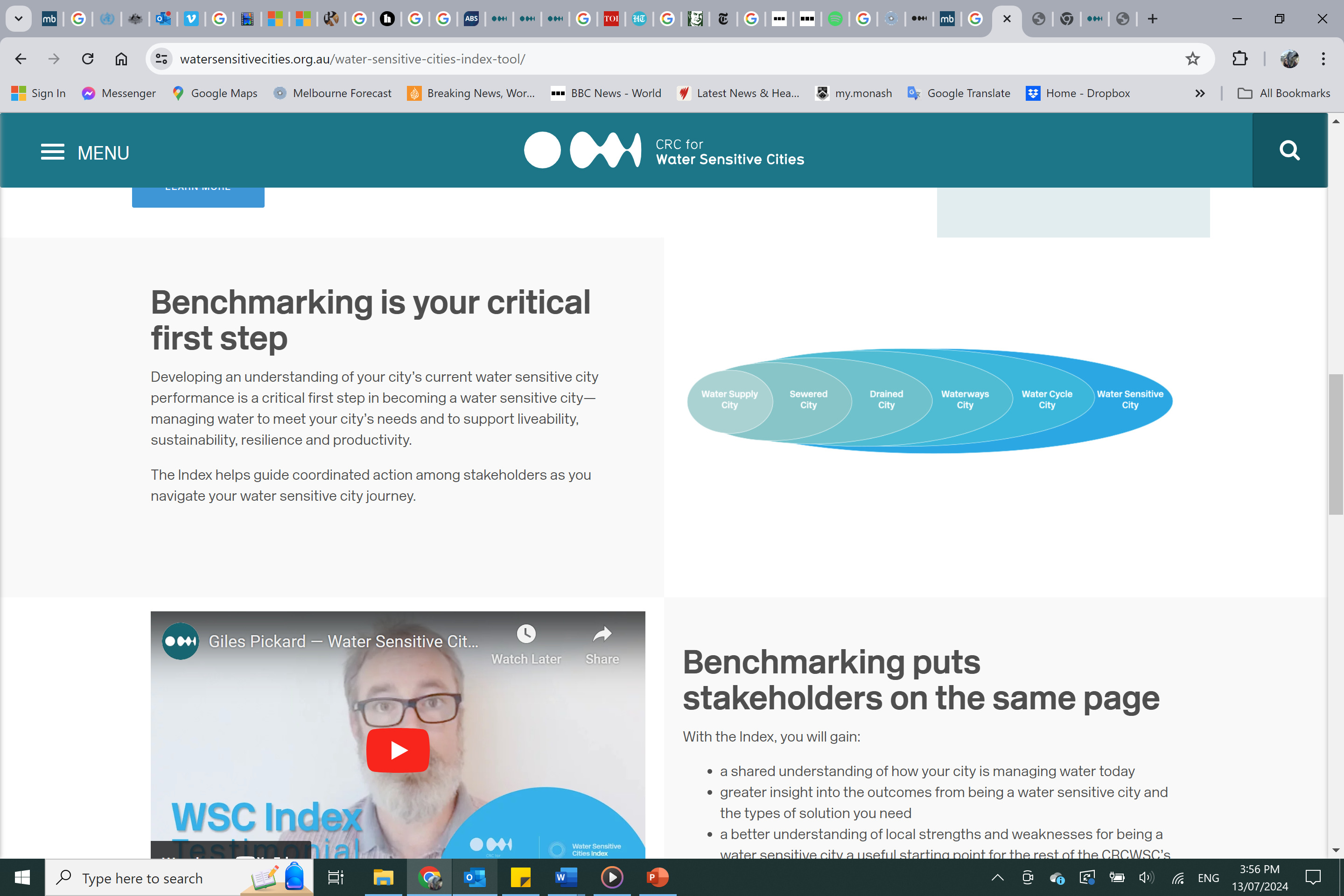
The Water Sensitive Cities approach was borne out of a response to three challenges facing urban informal communities as identified by the Australian Cooperative Research Centre for Water Sensitive Cities (CRCWSC) in 2012:

* population growth and changes in lifestyle and values;
* climate change and climatic variability; and
* challenging economic conditions.[[8]](#footnote-9)

The CRCWSC noted that urban informal communities’ water, sanitation and hygiene (WASH) needs could not be met by centralised systems common to urban areas nor decentralised systems common to rural and remote areas. The centralised or networked systems found in urban areas are often not possible to construct in informal settings and take too long to deliver. However, decentralised systems are often inadequate because of a lack of space, high population density and greater impacts of flooding.[[9]](#footnote-10) To address this gap, the CRCWSC called for fit-for-purpose solutions for improving WASH services and flood management in urban areas. They envisaged ‘cities and towns, and their regions, to be sustainable, resilient, productive and liveable.’ Specifically, a Water Sensitive City:

* serves as a potential water supply catchment, providing a range of different water sources at a range of different scales, and for a range of different uses;
* provides ecosystem services and a healthy natural environment, thereby offering a range of social, ecological, and economic benefits; and
* consists of water sensitive communities where citizens have the knowledge and desire to make wise choices about water, are actively engaged in decision-making, and demonstrate positive behaviours such as conserving water at home and not tipping chemicals down the drain.[[10]](#footnote-11)

To get to this point, cities transition through 6 different stages, from a ‘water supply city’ through to a ‘water sensitive city’ (shown in the figure below).



(Source: https://watersensitivecities.org.au/water-sensitive-cities-index-tool/)

The key enabling factors (and areas of focus) identified for the transition to a WSC include:

1. Champions who are invested in the transition
2. Platforms and processes for collaborative governance that includes stakeholders such as government, industry, residents and researchers
3. Contextual knowledge and understanding of issues relating to water, sanitation and health that is informed by local research
4. Projects and interventions that test and demonstrate different technologies and approaches
5. Appropriate tools and instruments for guiding the legislative, regulatory and marketing aspects of water management[[11]](#footnote-12)[[12]](#footnote-13)

Therefore, a WSC approach includes both the implementation of infrastructure such as rainwater harvesting, groundwater recharge, toilets, green spaces etc. as well as establishing or reinvigorating community and city forums of water management stakeholders, developing the capacity of those stakeholders and supporting necessary legislative and policy changes.

Figure 1: The Water Sensitive Cities approach. There are 6 different stages transition from a "water supply city" through to a "water sensitive city". The 6 stages illustrated in the diagram above are water supply city; sewered city; drained city; waterways city; water cycle city; and water sensitive city.

Implementation involves three components, broadly aligned under each of the three EOPO:

1. Two **community demonstration projects** (CDP) in each of **India** (two communities in Delhi) and **Pakistan** (communities in Islamabad and Rawalpindi), implemented by World Resources Institute (WRI) India and Worldwide Fund for Nature (WWF) Pakistan, respectively.
2. City-level and regional **learning workshops** involving key urban water sector stakeholders and focussed on promoting WSC. City-level workshops are facilitated in India and Pakistan by WRI and WWF, respectively. Regional workshops are facilitated by DFAT and Alluvium International Pty Ltd.
3. **Technical assistance** (TA) to address urban water management issues identified by partner governments, administered in **India**, **Pakistan** and **Nepal** by Arup Australia Pty Ltd, Adam Smith International Pty Ltd (ASI) and Alluvium International Pty Ltd, respectively. The TA in Pakistan concluded in mid-May 2024.

Oxford Policy Management (OPM) was contracted to provide MEL services for SAWASI.

SAWASI is administered from Canberra by DFAT’s South and Central Asia Development Section (SDV) and activities are implemented under the guidance of the Australian High Commission (AHC) in-country.

## Background and context

Access to clean water and safe sanitation is vital for health security, stability and sustainable development. This is particularly important in urban areas where access to water and sanitation is fundamental to mitigating the spread of infectious diseases. As well as social impacts, particularly on women and marginalised groups, the economic impacts of inadequate water are well documented.[[13]](#footnote-14) South Asia is particularly at risk, especially in urban areas. India and Pakistan are ranked the 13th and 14th (respectively) most water-stressed countries in the world[[14]](#footnote-15) partly because the Indus aquifer (which services both India and Pakistan) is assessed as the world’s second most stressed source of groundwater.[[15]](#footnote-16) In the case of India, demand for water will likely exceed the available supply by 2030, negatively impacting industries such as textiles, agribusiness and mining, leading to GDP losses of up to 12-percent due to industrial interruptions, energy outages and agricultural production losses.[[16]](#footnote-17) Similar scenarios are forecast across the region. It is in this context that the SAWASI program is being implemented.

Although a new program, SAWASI was designed following the conclusion of the Sustainable Development Investment Portfolio (SDIP) (2012 – 2020) which was broadly focussed on water-energy-food nexus issues in the region. Key findings of a final evaluation of SDIP included:

* There is potential for Australia to make a significant contribution to climate adaptation and mitigation in the region.
* A future program needs clearer program logic, realistic goals and an accessible performance assessment framework.
* Advisers should not form part of program management or governance arrangements.
* Cross-cutting issues need to be central in the design.
* Public diplomacy should be well-resourced.

The findings of the SDIP evaluation were discussed within DFAT, with the outcome being:

* The design of SAWASI prioritised the water and sanitation sector over food and energy sector interventions.
* DFAT engaged an array of stakeholders for implementation and positioned the Department (SDV) to manage SAWASI directly, rather than through a managing contractor.
* The program elevated a particular technical approach (Water Sensitive Cities) promoted by Monash University (see Figure 1).
* The program set out to promote Australian water sector expertise alongside support for partner country development needs.

SAWASI was designed as a regional program, with India and Pakistan selected first and Nepal selected in the third year. The in-country implementation budget breakdown (i.e. excluding the regional workshop and OPM contracts)[[17]](#footnote-18) was 45% (India), 49% (Pakistan) and 6% (Nepal). More than three-quarters (79%) of the in-country implementation budget is committed to the CDPs in India and Pakistan, with 21% allocated to TA in India (5.6%), Pakistan (9.5%) and Nepal (5.8%).

A pie chart with different colored circles

India CDP $4966,754; India TA $700,000; Pakistan CDP $5,000,000; Pakistan TA $1,200,000; Nepal TA $730,130. 

Figure 2: Budget breakdown for in-country implementation - the pie chart above shows the distribution of in-country implementation budget: India CDP $4966,754; India TA $700,000; Pakistan CDP $5,000,000; Pakistan TA $1,200,000; Nepal TA $730,130.

SAWASI was aligned with DFAT’s *South Asia Regional COVID-19 Development Response Plan* and remains aligned with the International Development Policy (2023, p 23). In India, AIWASI supports the *Australia-India Memorandum of Understanding on Water Cooperation (2020)* which falls under the *Australia-India Comprehensive Strategic Partnership*. In Pakistan, APWASI supports a *Pakistan-Australia Memorandum of Understanding (2018)* for collaborations on water, food and energy security. In Nepal, ANWASI sits under a Memorandum of Understanding for cooperation on water management between DFAT and the Water and Energy Commission Secretariate, Government of Nepal (August 2022).

# Methodology

A detailed methodology was set out in a Review Plan prepared by the MTR team and approved by DFAT. The MTR utilised both primary and secondary data, collected through document reviews, remote key informant interviews, face-to-face interviews, focus group discussions (FGD) and field observations. In-person interviews and observations were undertaken during field work in each of India and Pakistan[[18]](#footnote-19) over the period 25 May – 9 June 2024. A total of approximately 60 hours of interviews were conducted with around 81 stakeholders. A list of interviewees is provided in Appendix A.

Review data was coded[[19]](#footnote-20) against three lines of inquiry underpinned by 11 key evaluation questions (KEQ) as set out in Appendix B.

The primary audience for this MTR is DFAT; specifically, the SDV Section, which will make management decisions in relation to the remainder of the implementation period and future programming. Program management staff at DFAT Posts in Islamabad, New Delhi and Kathmandu may also utilise findings—especially country-specific findings in Appendices C and D. Implementing partners[[20]](#footnote-21) will be a secondary audience and will action recommendations in accord with DFAT’s management response. Government counterparts, implementing organisations and other involved stakeholders in partner countries may also benefit from the findings.

This MTR was constrained by typical limitations encountered by evaluations of international development assistance that are broadly related to the time available to enable rigorous interpretation of history, context and technical detail. However, the engagement of local consultants supported greater appreciation of the operating context; and the active involvement of DFAT staff throughout the MTR ensured understanding of operational history. The program in Nepal has only recently commenced (September 2023) hence this report presents less findings from this investment than India and Pakistan. The contract for the TA provider in Lahore (ASI) had finished by the time of this MTR. Arguably the major challenge facing the MTR concerned the scope, noting that in reality, SAWASI involved seven activities in four countries which has necessitated six[[21]](#footnote-22) evaluations rather than one.

# Findings

## Outline of findings

This section presents the findings of the MTR of SAWASI. Country-specific findings for India and Pakistan are presented in Appendices C and D, respectively, informed by fieldwork in those countries.[[22]](#footnote-23) Critique of GEDSI work and the program logic are presented in Appendices F and G.

Following an overall assessment below, program-wide findings for SAWASI are structured with reference to three broad lines of inquiry defined in the Review Plan:

1. Assess **progress** towards the three EOPO.
2. Review the merits of the **modality and governance** arrangements.
3. Document key **achievements and lessons** from implementation.

Recommendations are embedded in the findings text as they arise, highlighted in text boxes, and also consolidated on page x for convenience.

The following section presents a high-level overview of findings, which are elaborated in the subsequent sections.

## Overall assessment

SAWASI was designed as a regional program to inculcate WSC approaches in South Asia. In practice, it has been a multi-country (India, Pakistan and Nepal) funding mechanism administered by DFAT Canberra and managed by DFAT’s AHC staff in the partner countries. This situation represents a divergence in the rhetoric of the design and the reality of implementation. While capable and committed people in Canberra and in the partner countries have done good work, project results are discrete and have not achieved the coherent ambition of the SAWASI regional concept, with limited evidence of progress towards WSC status. Integrated programming has been challenged by separate contracting and management of CDPs and TA *within* the partner countries. The practical implication is that rather than being an integrated regional program, SAWASI is a portfolio of five discrete projects implemented in three South Asian countries (and a regional workshop convened in a fourth country)—unified loosely by variable application of WSC concepts:

* **India**:
  1. TA in the Ministry of Housing and Urban Affairs (MoHUA)
  2. CDP in Mubarakpur Dabas and Bakkarwala, Delhi
* **Pakistan:**
  1. TA for Government of Punjab, Water and Sanitation Agency (WASA) Lahore
  2. CDP in James Town (Rawalpindi) and Farash Town (Islamabad)
* **Nepal:**
  1. TA in the Water and Energy Commission Secretariat (WECS), Pokhara and Tulsipar

Appendix E presents a matrix summarising the country-specific investments (against the three EOPO), the key partners involved, and their counterparts.

**Notwithstanding evident shortcomings with the design and implementation of the regional modality, programming in each country has been relevant to local needs and priorities and broadly aligned with Australia’s policy settings. Implementation of the discrete projects by DFAT staff and implementing partners has been largely effective, and well regarded by counterparts and beneficiaries.** CDPs in India and Pakistan have provided opportunities for public diplomacy and visitation, as well as enabling DFAT reporting against development policy priorities such as gender equality, disability and social inclusion (GEDSI) and climate resilience. The TA projects, while less visible, have delivered substantive benefits for their respective counterparts,[[23]](#footnote-24) and as such, hold potential for DFAT to position for access and influence. At the time of this MTR, some aspects of some projects were delayed but most should deliver the intended scope by the end-of-investment (June 2025)—the major exception being capital works under the India CDP.

There has been weak overall governance of the program—either a cause or consequence of the fragmented structure. A corollary is that performance management and overall coherence have suffered (see Section 3.4).[[24]](#footnote-25) There are legitimate questions about sustainability in circumstances where the regional modality has not met expectations and where there is currently no commitment for further funding by DFAT. A key issue for the remainder of the implementation period concerns positioning the in-country investments to optimise sustainability prospects, and hence value-for-money.

From an overall program standpoint, MEL has been challenging, including in relation to capturing and reporting evidence of contribution to DFAT’s GEDSI and climate resilience policy priorities—notwithstanding that the individual CDP and TA projects have made contributions to these agenda. For example, in both India and Pakistan, the CDPs have fostered the inclusion of women in the newly established or newly invigorated community management groups. The CDPs have provided training and support so that women feel more empowered to approach service providers directly when they need issues such as inadequate water supply or street lighting addressed (see Appendix F for more detailed GEDSI findings).

The following section elaborates the above overall assessment with respect to each of the three EOPO.

## Progress towards End-Of-Program Outcomes

This section discusses evidence of progress towards the three EOPO set out in Section 1.2, and implications for the remainder of the investment.

The program logic defined a goal, three EOPO and four intermediate outcomes. The clear intent was that three components (aligned to each of the three EOPO) would be integrated in order to achieve impact (broadly conceived as replication and/or scale-up of successful WSC-related interventions):

* **Community Demonstration Projects (CDP)** would downscale WSC concepts within four disadvantaged communities to operationalise various social/governance and technical interventions aimed at improving water and sanitation security at household level and contribute to climate resilience.
* **Technical advisors (TA)** positioned within key counterpart institutions would advocate for city-wide water and sanitation planning, facilitate the engagement of counterparts in CDP progress and position the institutions for replication or scale-up of successful interventions towards WSC status.
* **Learning processes** facilitated at community, city, national and regional levels would strengthen implementation of CDPs and TA, provide technical support for contextualising WSC approaches, and mobilise replication and scale-up.

All of this was expected both to draw on, and showcase, Australia’s expertise in urban water and sanitation, thereby cementing bilateral relationships at technical and political levels, creating further opportunities for trade and development partnerships.

**A key finding of this MTR is that this integrated concept has not been borne out in reality due to a range of conceptual, structural and managerial difficulties.** However, notwithstanding the problematic design and implementation of the regional modality, individual investments have achieved notable, albeit discrete, achievements—a credit to individuals involved.

Arguably, the conceptual difficulties emerged from challenges in succinctly articulating the vision for SAWASI through the program logic, which in turn had implications for contracting, managing and monitoring implementation. The MTR team was advised that during the inception phase, all key stakeholders participated in a long process (around six months) to jointly review and revise the program logic. This process—facilitated by OPM—had the benefit of engaging implementing partners and DFAT in discussions about the intent and scope of the program but proved challenging due to diverse priorities and interpretations in the country contexts, necessitating pragmatic compromise.[[25]](#footnote-26) Consequently, there are a range of technical issues with the current program logic which render it non-conforming with DFAT M&E standards and program theory conventions more broadly (see Appendix G for a technical critique of the program logic).

Beyond these conceptual issues, a range of structural and managerial factors have diverted the current program from the original SAWASI vision. These are discussed further in Section 3.4. but for the purposes of this section, key practical implications include:

* **Fragmentation:** implementation of program components has been fragmented/disparate rather than compounding and mutually reinforcing to maximise impact. Rather than an integrated regional program, SAWASI has been a multi-country funding mechanism.
* **MEL:** program-wide MEL arrangements have been challenging to operationalise and have frustrated all parties, including OPM, which until recently has not been resourced to undertake primary (in-country) data collection.

An overarching consequence is that it is difficult to form clear judgements about progress towards the goal and EOPOs because the underlying logic is problematic and measurement of progress ambiguous.[[26]](#footnote-27) Hence, the MTR team instead focused on assessing progress within each of the three EOPO towards the program goal with broad reference to the DAC criteria.

The current situation concerning each of the three EOPO is discussed below. Note that EOPO 1 (CDP) is discussed first, followed by EOPO 3 (TA), since these are the substantive implementation components. EOPO 2 (learning) is discussed third as this relates to efforts towards regional integration but reflects the smallest financial and operational component.

### EOPO 1: “By 2025, four disadvantaged communities in South Asian cities have transitioned towards WSC”

EOPO 1 concerns the implementation of CDPs in India and Pakistan (but not Nepal) by a WRI-led consortium and a WWF-led consortium, respectively.

Approaches taken in each country are broadly similar insofar as they have worked to downscale WSC concepts in disadvantaged communities, and to contextualise approaches to the prevailing socio-economic and institutional conditions.[[27]](#footnote-28) Both projects have actively cultivated the approval and engagement of relevant local authorities. The MTR team observed positive interactions with community members including the formation of appropriate representative fora to advocate for community needs. The MTR team witnessed small-scale infrastructure works (commencing, ongoing and completed) that aimed to demonstrate WSC principles.[[28]](#footnote-29) Further, in the absence of clear direction from the SAWASI design and MEL plan, the CDP consortia in India and Pakistan applied their own GEDSI guidelines for community development, integrating GEDSI into community vulnerability/needs analyses and action plans (see Appendix F). While this initiative is commendable, more could be done from a M&E standpoint over the remainder of the investment to examine changes in barriers to equality and inclusion, and to assess impact on various segments of the population.

The APWASI CDP (Pakistan) is considered on track to complete the scope of work by June 2025. The AIWASI CDP (India) is estimated to be up to 18 months behind schedule. The main contributing factors reportedly include: i) delays associated with local government approvals, ii) protracted community mobilisation processes, and iii) convoluted analysis and design steps. Some interviewees also considered that a program requirement to partner with an Australia-based technical organisation introduced delays associated with the need to orient and contextualise products to the India development environment.

The CDPs in India and Pakistan have identified and seek to meet community needs through detailed research conducted by the consortiums with community members. In Pakistan, residents represented by the community management groups expressed gratitude for the infrastructure provided by the program (e.g. disability-accessible park, rainwater harvesting (RWH) systems and water filtration systems). In both countries, the CDP has established previously disconnected city-level governance bodies which bring together actors in the water and sanitation sector. The key achievements on the CDPs are elaborated in Appendices C and D.

Arguably, the emerging challenge for both CDPs relates less to completing the technical scope of work, and more to the future impact and sustainability of successful interventions. The very name of the projects (‘Community *Demonstration* Projects’) implies a process of testing, showcasing and then expanding success. Not unusually, implementing teams (and DFAT program mangers) have become more focused on program delivery than on scale-up. Interviewees provided diverse responses to the question: ‘*What are you demonstrating, and to whom?’* This suggests an emerging risk that even successful completion of project scope could represent a case of winning the ‘battle’ while losing the ‘war’ if appropriate focus is not given to the ‘mechanics’ of replication and scale-up. Put another way, there will be legitimate questions at end-of-program about value-for-money in circumstances where CDPs are not positioned for replication/scale-up by counterparts.

Whilst the *achievement* *of* replication and/or scale-up is beyond the current scope of work, *positioning* *for* replication/scale-up by counterparts is undoubtedly within scope. Even this will involve significant work. Global experience confirms that replication/scale-up rarely happens organically. Rather, it demands strategic design, dedicated resources, technical insight, political and advocacy skill. Broad steps are likely to include:

1. **Evaluate:** identify successful interventions and discern the drivers of success.
2. **Recruit:** identify the key stakeholders who are amendable to—and capable of—replication/scale-up.
3. **Cultivate:** engage the curiosity of key stakeholders in the merits/potential of successful interventions.
4. **Document:** capture the essence of successful models or approaches for wider application.[[29]](#footnote-30)
5. **Advocate:** plan and execute a range of initiatives to foster replication/scale-up.[[30]](#footnote-31)

This finding should not suggest that nothing has been done to position for replication/scale-up. The MTR team heard clear interest from city officials in both Delhi and Islamabad about replicating project interventions, which provides a valuable starting point. The establishment of the multi-stakeholder Delhi Water Forum (DWF) in India and the City-wide Partnership in Islamabad are particularly notable. However, the pathway for scale-up to state/province or national level is less clear, though there are opportunities generated through the TA (see below in relation to EOPO 3).[[31]](#footnote-32)

**Clarification of Terminology**

The concepts of ‘sustainability’, ‘replication’ and ‘scale-up’ are commonly used in international development programming but are often not clearly differentiated.

**Sustainability** concerns the likelihood that project interventions will be continued by key counterparts/change agents for the benefit of the target population, beyond project funding.

**Replication** moves beyond project sustainability, anticipating that counterparts/change agents (e.g. city officials) will extend the reach of the project benefits to new target populations (e.g. neighbouring communities); and/or that project approaches (e.g. community consultation processes) in target communities might be taken up by other actors (e.g. other city departments).

**Scale-up** is a more advanced social development, anticipating that new counterparts/change agents (e.g. state/province officials or national officials) might adopt project innovations and implement these for the benefit of new/wider target populations.

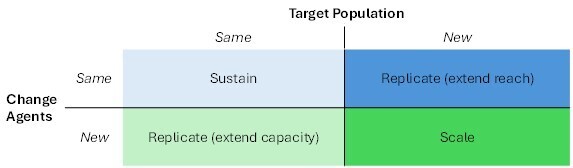


Figure 3: The figure above shows change agents for differentiation of sustainability, replication and scale-up. Change agents refer to people through which change occurs. The figure illustrates how different types of development approaches (sustainability, replication, and scale-up) taken by change agents affect target populations.

**Recommendations:**

1. DFAT should consider negotiating a no-cost-extension with the WRI (India) consortium to enable completion of the CDP scope and to position for replication/scale-up with counterparts.
2. WRI (India) and WWF (Pakistan) should prioritise positioning of successful CDP interventions for replication and/or scale-up by relevant counterparts, including through engaging professional knowledge product and policy advocacy capability.
3. The AHCs in India and Pakistan should proactively seek out public diplomacy and policy influence opportunities in support of CDP replication and scale-up by government counterparts.

From a technical standpoint, the wording of EOPO 1 creates an explicit focus on the WSC approach.[[32]](#footnote-33) WSC was borne out of an Australian Cooperative Research Centre (CRC, 2012)[[33]](#footnote-34) led by Monash University.[[34]](#footnote-35) The MTR team was unable to discern the path by which WSC became a central focus of the SAWASI design. Most interviewees confirmed the broad relevance of WSC concepts in target countries—though many understood the concepts to be drawn more generally from sustainable resource management and nature-based solutions, preferring the term ‘Climate Smart Cities’. A concern for others was that WSC was developed for city-wide application rather than at community or household level and whether WSC could apply to the South Asia context. However, most people involved directly with CDP implementation found that the concepts could be readily downscaled in the four target communities.

*“Day to day life is hard in [CDP communities]. Households have a short-term focus on surviving and meeting immediate needs in health and education. It’s challenging to shift their focus to broader, more abstract issues. They don’t understand the ‘WSC’ terminology, though the core issues are important. The WSC approach provides first steps. It has similar thinking to the Government’s ‘Climate Smart Cities’.” - CDP team member*

On balance, the elevation of WSC to EOPO level in a DFAT design—although irregular—has been less of an issue than the phrasing of the EOPO which is unattainable during the life of this investment. From a program-wide perspective, assessment of progress towards EOPO 1 (as phrased) is problematic because there is no universally agreed definition of WSC for the purposes of SAWASI, and further, different approaches were adopted to measure WSC progress in each country.

A broader issue for DFAT in relation to EOPO 1 arises from Australia’s commitment to climate resilience as a core priority.[[35]](#footnote-36) In order to meet international climate finance accounting requirements, climate resilience must be referenced in outcome statements (and indeed the wording in the original SAWASI design document did this[[36]](#footnote-37)). While WSC concepts are firmly aligned with this agenda at a fundamental level, reframing the EOPO to explicitly reference the more widely accepted language of ‘climate resilient cities’ would streamline DFAT’s reporting (see suggestions in Appendix G).

**Recommendation:**

1. DFAT should rephrase EOPO 1 to reflect an explicit contribution to climate resilient cities in support of streamlined international climate finance reporting.

A DFAT requirement of the CDP grants was that implementing organisations must partner with an Australian technical organisation to support inculcating the WSC approach. This was generally considered to have fostered positive collaborations, however, several interviewees also suggested that this requirement contributed to delays when technical solutions put forward by Australian partners required contextualisation in disadvantaged South Asian settings.

A broader consideration for DFAT in future concerns the extent to which the requirement to use an Australian technical approach is consistent with Australia’s new International Development Policy (2023) commitment to locally-led development.[[37]](#footnote-38)

### EOPO 3: “Local, state and/or national government officials TA needs met and have a positive attitude towards partnership with Australian urban water experts”

EOPO 3 concerns the provision of TA in India, Pakistan and Nepal by Arup, ASI and Alluvium, respectively. A key finding of this MTR is that the TA investments have each delivered important and potentially strategic results in their respective contexts, but collectively have not contributed to the wider intent of the SAWASI regional modality.

The MTR team formed the view that in all three countries, work delivered by the TA was relevant and well targeted insofar as it met the stated needs and priorities of partner governments. Although representing a tiny contribution to national sector investment, the TA projects have contributed to strategic results. The demand-responsive approach adopted by the three AHCs to deploying TA ensured relevance and impact in their individual contexts. DFAT Posts in Pakistan and Nepal actively sought out the needs/priorities of counterparts in the water and sanitation sector[[38]](#footnote-39), and tasked TA providers with delivering substantive packages of work to address these needs.[[39]](#footnote-40) In India, the TA has also delivered some packages of work, but its most visible feature is the provision of highly responsive and strategic support to the Federal Government’s national water and sanitation policy response for urban reforms (AMRUT 2.0) and fast tracking compliance and approval of GoI funds for states/cities.[[40]](#footnote-41)

In all three cases there is clear causality between the contribution of the TA and the needs of households and businesses. Indeed, during the MTR mission in India, Delhi experienced an unprecedented heat wave, with maximum temperatures reaching above 50oC, bringing critical water shortages and causing death.[[41]](#footnote-42) In Nepal and Pakistan, TA delivered technical products that should position sector counterparts to more strategically manage flooding risks in the context of rapidly escalating climate impacts. In India, the TA along with other donor funded TAs[[42]](#footnote-43) has—amongst other things—provided support to city/state officials[[43]](#footnote-44) to comply with AMRUT 2.0 financing requirements, thereby helping to unlock significant financing to Indian States/cities[[44]](#footnote-45) for improved household water and sanitation. This represents significant leverage by Australia in support of India’s ambitious Sustainable Development Goals (SDG) 6 agenda—a Prime Ministerial priority.

**Lahore Urban Flooding**

Lahore is a mega city, accommodating more than 13,000,000 people who are highly impacted by annual flooding events. Rainfall runoff has increased 1.7-fold over the past 10 years, with a discernible lengthening of the rainy season since 2010, and with consequent impacts on households, communities and businesses. These impacts, compounded by drainage issues across the city of Lahore, are projected to worsen in climate change-related scenarios.

People walking through a flooded street

 A large hole in the ground



Figure 4: The photos above are scenes of City of Lahore flooding in 2018 (source: CNN, July 2018)

The specific contributions of the TA in Pakistan and India are elaborated in Appendices C and D.

Notwithstanding the above local/discrete achievements, SAWASI was designed and approved by the Commonwealth to pursue a coherent regional agenda and the current arrangements have not supported this.

As noted above (p 6), the SAWASI concept anticipated that TA delivered in counterpart agencies/departments and the CDPs would be aligned, and in combination, the components would foster progress towards WSC status. Within this conception, the TA would provide a city-wide policy context for WSC, creating relevance for possible CDP replication/scale-up. Put another way, global experience indicates that ‘city-wide’ or ‘catchment-wide’ planning rarely happens spontaneously but rather requires the establishment of a unifying framework and an enabling policy environment. The WSC approach could plausibly provide such a framework in circumstances where none have otherwise been adopted by partner governments. This is a clear role for TA.

However, in practice, the TA in each of the three countries has not explicitly promoted WSC approaches, and implementation has been discrete (with little or no reference to the SAWASI intent). Further, in India and Pakistan, TA has been implemented independently of the CDPs.[[45]](#footnote-46) In retrospect, the SAWASI design document should have included draft ToRs for the TA that (at least) required co-location with the CDPs—institutionally and/or geographically. This would have enhanced the prospects for synergy and impact. This issue is most evident in Pakistan where the CDP is implemented in Islamabad/Rawalpindi, while TA has been delivered in Lahore—a different jurisdiction almost 400 kilometres south-east.

*“Having separate TA providers has eroded coherence. This should have been unified. We should have been clear about [whether] this is essentially a portfolio of bilateral projects with funding advanced to Posts to manage locally, or if it is a single program managed from Canberra like AWP or CRC”. - Informed observer, not directly involved in implementation*

Notably, program staff at Delhi Post argued strongly that implementing the CDP and TA separately was an important risk distribution strategy (i.e. by involving different organisations in each component); and that integration was not relevant since each project operates at radically different scales (i.e. CDP within local disadvantaged communities, and TA in national strategic policy and financing). The MTR team respected this argument as defensible until now (i.e. before the CDP has demonstrated scalable success). It was also defensible in circumstances where the concept of an integrated SAWASI set out in the design had not been prioritised across the region. However, moving forward, there is increasingly a case for integration of CDP and TA as SAWASI progresses towards completion, positioning for replication/scale-up. Further, integration of the CDP and TA would be supportive of ‘city-wide’ planning as promoted by the WSC approach.

An integrated approach may have also provided better value-for-money since, as noted above, the CDP grants required Australian technical expertise to be engaged, while broadly similar Australian technical expertise was separately engaged for the TA projects. A single/overall technical consultancy in each country—if not the region—providing supervisory support to locally engaged advisers, would have been a defensible proposition for a regional TA program budgeted at only AUD2.6 million. Instead, Australia has expended management fees on five Australian engineering consultancies in the one program, each providing substantively the same expertise, thereby contributing to fragmentation and reducing value-for-money.

*“I need more information about how to service smaller cities, for example cities of 40,000 people, where decentralised sewage treatment plants are needed”. - Staff member, MoHUA*

Rather than merely retrospective critique, this finding about integration of TA and CDP has current relevance. The MTR team heard unprompted interest from strategic TA counterparts (in both India and Pakistan[[46]](#footnote-47)) in learning more about community-level water and sanitation innovations. In both cases, the fact that DFAT was already funding demonstration projects was welcomed. For DFAT, this offers opportunity from two standpoints:

* + **Creating pathways for scale-up:** in circumstances where—as noted above in relation to EOPO 1—the CDPs face challenges to scale-up, fostering the engagement of strategic TA counterparts could present a potential pathway.
  + **Facilitating access and influence:** in circumstances where the TA has not generated visible results for Australian diplomatic and public diplomacy purposes, the elevation of CDPs may offer potential for DFAT to engage at senior level, and then also to promote the significant contribution of the TA investments.

**Recommendation:**

1. AHCs in India and Pakistan should utilise the CDP scale-up advocacy as an opportunity for access and influence with strategic counterparts associated with TA projects, noting the critical issue of water and sanitation for both federal governments, and Australia’s accepted expertise in the sector.

The most plausible explanation for the fragmentation of the TA and CDP (and of SAWASI more broadly) is not through a failing of the individuals responsible for implementing each component, but rather through the vacuum of overall governance and strategic management of the design from the outset which did not incentivise—or oblige—coherence and collaboration.

EOPO 3 draws explicit focus on promoting Australian urban water expertise. As noted above, this focus creates subtle tensions from a development standpoint in relation to DFAT’s locally-led development policy. However, from a trade and diplomacy standpoint, the promotion of Australia’s capability in the water sector makes sense. Striking a balance remains DFAT’s perennial challenge.

Australian expertise has been engaged in slightly different ways in each of the three countries, although there are similarities. All three TA projects have involved Australian technical consultancies, working with locally engaged advisers. In India and Nepal, these are national staff/contractors of DFAT’s contracted technical consultancy (Arup and Alluvium, respectively). In Pakistan, the Australian contractor (ASI) subcontracted MMP—a wholly-owned Pakistan engineering consultancy[[47]](#footnote-48) to undertake the substantive technical work, with ASI facilitating stakeholder engagement (see Appendix E for a summary of the various actors engaged in each country/project). In all three countries, the local consultants/staff were critical for ensuring the context-relevance of advice/services.

In the case of Arup (India), the advisory model has evolved from a short-term fly in fly out (FIFO) Australia-based TA to a locally-based TA following feedback from the Indian government. The current model is lauded by all senior officials interviewed by the MTR team and involves just three Indian technical staff of Arup delivering frontline responsive support directly to Directors and the Additional Secretary in AMRUT 2.0. These technical staff benefit from back-end support from Australia-based experts in Arup when required for quick turn-around of advice, and for larger packages of work negotiated between AMRUT 2.0 and the AHC. The MTR team formed the view that the critical success factor derives from the tactical ways of working of the individuals who deliver technically sound advice in a timely and reliable form that is accessible to political/policy stakeholders. In brief, they have astutely engendered the trust of key AMRUT 2.0 decision-makers. However, a downside of this approach is that there appears little consciousness of Australia’s involvement among some stakeholders.

The MTR team found that whilst counterparts valued having direct access to information about international best practice through the TA, there was no specific value in the fact that the TA is resourced by Australia *per se* (or in some cases involves Australian expertise); and is arguably only peripherally related to promoting WSC approaches.

### EOPO 2: “Improved knowledge amongst workshop attendees of water sensitive cities approach”

EOPO 2 concerns the facilitation of learning and knowledge exchange about WSC in South Asia. Arguably, EOPO 2 is the key mechanism for promoting coherence and integration across the regional investment.[[48]](#footnote-49)

In other DFAT regional programs, there is a clear counterpart through which the regional program is administered, and in which capacity, learning or systems are invested. Examples in DFAT include the ASEAN Secretariat, the Mekong River Commission (MRC) and the Secretariat of the Pacific Regional Environment Programme (SPREP). For SAWASI, there is no such regional counterpart, for many reasons, including the long-standing tensions between some countries. While the absence of a regional counterpart is not necessarily a failing, this along with the fact that there was no central ‘secretariat’ or dedicated management function to convene and coordinate stakeholders—to champion regionality (see Section 3.4)—has created a range of difficulties.

In the absence of a regional counterpart, the main mechanism employed[[49]](#footnote-50) to promote program integration has been a regional workshop in Bangkok convened in August 2023. Bangkok was selected as a central/accessible destination for all country stakeholders (noting diplomatic difficulties between India and Pakistan). The workshop involved 46 participants over 3 days, with presentations by project teams about challenges, approaches, GEDSI, M&E reporting requirements, and policies relating to water and climate change.

Evidently, several of the attendees at the workshop were previously unaware of the existence of the wider regional program, or indeed of their in-country TA/CDP colleagues. Most participants found value in the workshop, though some interviewees expressed deeper concerns/questions about its purpose. There is an important distinction between ‘*intra-program learning*’—with an internal focus on exchange and improving program delivery—and ‘*extra-program learning*’, focussed on engaging key change agents for the purpose of disseminating innovations and promoting reform. The Bangkok workshop implicitly focussed on the former, with teams and sector specialists exchanging knowledge about the WSC approach for application within the CDPs in particular. This is a legitimate emphasis—especially if scheduled early in implementation (which was not possible due to COVID-19)—however, the value of this approach was diminished by the fact that no mechanism was established to foster ongoing collaboration between implementing partners or Australian experts. There is limited evidence of enduring benefit from the workshop.

This finding should not be taken as criticism of the workshop facilitators or planners *per se*—noting that it was well run and attracted predominantly positive feedback. Rather, the core issue is the fundamental disconnect that evolved between the SAWASI design and the subsequent rollout of discrete investments across three countries, which rendered the goal of a regional workshop unattainable, if not redundant. Put another way, bringing together 46 people from three countries for just three days was always unlikely to be sufficient to engineer meaningful ‘regionality’.

While almost all participants appreciated attending the Bangkok workshop, when pressed about the most valuable aspect, most interviewees identified discussions with Professor Tony Wong[[50]](#footnote-51). Professor Wong (Sustainable Development Institute, Monash University) engaged voluntarily as a keynote speaker at the workshop, and also spent time with each of the SAWASI project teams reviewing technical aspects of the work and offering advice.

The planning and management of the Bangkok workshop fell to the DFAT’s SDV Section in Canberra, supported by Alluvium. This placed significant additional burden on the staff, in addition to administering all contracts under SAWASI, managing annual reporting and processing payments (see Section 3.4).

In light of the issues raised above, in relation to a proposed second regional workshop, there may be greater value-for-money in instead mobilising a respected urban water and sanitation specialist, and perhaps a sector GEDSI specialist and sustainability or knowledge management specialist. This group could be deployed to spend appropriate days with each of the five SAWASI project teams/counterparts critiquing approaches and providing targeted technical advice. The focus of such a mission would be on positioning for replication/scale-up in order to maximise impact and value-for money as the program approaches conclusion and exit. If sufficiently senior specialists can be recruited, the visit may also provide the AHCs with a public diplomacy opportunity to engage with senior counterparts, enabling further promotion of replication/scale-up (see Recommendation 5).

If the above alternative approach is unsupported, and DFAT elects to proceed with a second regional workshop, it is recommended that workshop participants are consulted well ahead to ensure that the workshop best meets their needs and can create the greatest value for money and time.

**Recommendation:**

1. DFAT should reconsider the format of a second regional workshop in favour of in-country project consultations by technical specialists. However, if a regional workshop is to go ahead, DFAT should ensure that participants are consulted well ahead about their priorities for the workshop.

Beyond the regional learning agenda pursued under EOPO 2 through the Bangkok workshop, each CDP has implemented context-relevant city-wide fora to promote knowledge exchange and improved sector governance. These are described with reference to AIWASI and APWASI in Appendices C and D.

## Merits of the modality and governance arrangements

As noted above, SAWASI was designed as a regional program modality, but in practice has been a multi-country funding mechanism, unified loosely by variable application of the WSC approach.

### DFAT management and governance

The ‘program’ has been administered from Canberra by SDV—a section also responsible for regional development activities across South Asia (the Pakistan and Nepal Desks in DFAT are managed by a different Section but within the same Branch). Meanwhile, the India Desk is managed from a different branch but in the same Division SDV. This suggests a complex ‘matrix structure’ within the Department with respect to SAWASI.

SDV is currently resourced with 1.5 FTE staff, overseen by a director. These staff engage regularly with the three DFAT Posts (Delhi, Islamabad and Kathmandu) in order to manage seven implementation contracts (spanning 12 separate implementing partners, directly and indirectly):

* + Arup (India TA)
  + WRI (India CDP)
  + ASI (Pakistan TA)
  + WWF (Pakistan CDP)
  + Alluvium (Nepal TA)
  + OPM (M&E contractor)

Also, as noted above, is the fact that SDV was tasked with planning and managing the Bangkok regional workshop (August 2023), which involved a further contract with Alluvium to support facilitation and logistics.[[51]](#footnote-52) An interpretation of DFAT’s management structure for SAWASI is presented below.

SDV in the same Branch as APS and IBB which are country desks in Canberra, oversees SAWASI which includes CDP and TA projects managed by AHC Delhi, AHC Islamabad, and AHC Kathmandu, as well as direct management of M&E contract with OPM and Regional Workshop contract with Alluvium.  AHC Delhi manages Arup TA and WRI CDP and WRI CDP is in partnership with MHT, NIUA and McGC. AHC Islamabad manages ASI TA and WWF CDP. ASI TA is in partnership with MMP and WWF CDP is in partnership with IWMI and HARC. AHC Kathmandu manages Alluvium TA. 

Figure 5: The diagram above provides an overview of management structure of SAWASI by SDV (unofficial structure)

The above carries a substantial workload for a small team. This workload was further compounded by poorly conceived Service Orders, which in broad terms, compromised strict budget management and accountability, with one contractor receiving a significant advance payment prior to implementation—an irregular contracting arrangement for work of this nature. To the credit of SDV, these contractual weaknesses have been managed through scrutiny of invoices and addressed through contract amendments.

The structural arrangement described above fits the description of a ‘fragmented adhocracy’.[[52]](#footnote-53) The MTR team was informed by a person involved at the inception of SAWASI that it arose from a recommendation of the final evaluation of the predecessor program (SDIP)—that advisers/contractors could be involved with technical implementation but should not play a role in management or governance. Although well-intentioned, this recommendation appears misguided in circumstances where the Department is constrained in providing sufficient management and technical staff for direct oversight of an ambitious regional program. Put differently: if DFAT were to tender management of a complex regional technical program to be administered by 1.5 FTE, it is unlikely that any reputable managing contractor would apply because of the risk this would carry.

This finding is not a criticism of DFAT staff involved in Canberra or at the Posts. While capable and committed people in Canberra and in the partner countries have worked hard and achieved good results, these results are localised. Rather, this finding offers lessons for future designs of this nature, highlighting the critical importance of strategic management and governance arrangements to curtail strategic drift and fragmentation.

A notable strength of the staffing has been DFAT’s engagement of locally engaged/contracted staff with sector experience and technical skill at the three AHCs. These staff have been actively involved in implementation, managing risks and providing a bulwark against a high turnover of Australia-based (A-based) staff at Posts and also within SDV (where there have been three Program Managers since inception). SDV has relied on the LES to approve progress payments, assure technical quality and facilitate annual reporting. A-based staff in India and Pakistan confirmed that the program would be highly challenging to manage without such staff.

Given the structural inefficiencies and the fragmentation of the ‘regional program’ described in this report, there would seem to be a strong value-for-money case for AHCs taking over in-country contract management.[[53]](#footnote-54) This may require some initial support/training for LES technical staff, but there would be an overall efficiency gain in circumstances where SDV already seeks LES confirmation of deliverables before processing payments. In practice, this approach would surrender any remaining ambition for regional integration—a pragmatic reality.[[54]](#footnote-55)

**Recommendation:**

1. AHCs should take over responsibility for program administration from SDV in recognition that SAWASI is in practice a portfolio of bilateral projects, thereby improving efficiency.

### Program-wide MEL

Recognising the bilateral foci of SAWASI investments would also change the need for a program-wide MEL contractor. The engagement of OPM as an independent/stand-alone MEL provider—separate from implementers, donor and counterparts—was aligned with international good practice in relation to independence/contestability. However, in reality, it has been problematic for several reasons.

First, as discussed throughout this report, the fact that discrete projects are managed/implemented in each country with limited commonality erodes the value of an overall M&E provider. This issue is compounded by the fact that OPM team members are geographically distributed across multiple time zones, and, except for Islamabad, are not co-located with implementing teams.

Second, contractual arrangements do not give OPM any authority to specify MEL activities by implementing partners. In practice, OPM is a peer of implementing partners, and as such can *advise* but not *prescribe* MEL protocols or methods. A consequence is that the MEL arrangements are not standardised, making it difficult to draw comparisons across the program.

Third, until a recent contract amendment, OPM was not resourced to undertake primary data collection in the target countries. In practice, this positioned OPM to *collate* rather than *synthesise*—the latter being a much higher-order function. By merely collating information reported by implementing partners, OPM was exposed to legitimate questions about the value-add of this contract from implementers and DFAT staff due to an apparent lack of primary analysis. Indicative of this limitation is the fact that preparation of DFAT’s annual Investment Monitoring Report (IMR) has not drawn on OPM reports; instead drawing directly on AHC staff and implementing partners.

Fourth, evidently there has not been clarity about the role of OPM in relation to MEL *vis-à-vis* technical quality assurance. Some interviewees felt that OPM should have provided stronger technical oversight of water and sanitation interventions and GEDSI work. But in circumstances where the AHCs engaged technical staff to manage in-country implementation, this would have been a duplication of responsibility. Put another way, for practical purposes technical contestability has been between the implementing partners and DFAT’s LES. Had DFAT instead hired LES with generic contract administration skills, there would have been a clearer justification for the MEL contractor to provide technical oversight of water and sanitation interventions—and these staff would have necessarily been co-located with implementers. Regardless, OPM’s role in relation to quality assuring water and sanitation work has been untenable.

Fifth, the fact that there has been no overall program governance structure to ensure strategic direction and accountability[[55]](#footnote-56) has arguably meant that the program-wide MEL function has lacked a natural ‘audience’. This issue is compounded by the fact that while OPM has circulated copies of reports to implementing partners, it has not provided substantive feedback and benchmarking information. The effect is that few people are able to state who benefits from OPM’s work, with implementers conveying that reporting is largely unidirectional.

Overall, the MTR formed the view that the MEL arrangements are not currently fit-for-purpose, creating frustration for all parties. This finding is not to criticise individual OPM team members, who engaged professionally with the MTR team on these discussions, but is directed at the structural arrangements that have in effect restricted the ability of OPM to provide the expected services.[[56]](#footnote-57)

Given the limited time remaining for SAWASI implementation, the best use of the MEL resources would arguably be to drive the sustainability/replication/scale-up agenda discussed elsewhere in this report—focusing on deciphering the drivers of success and causes of failure. Such a focus could extend to development of knowledge products and facilitation of policy advocacy with counterparts.

In surrendering ambition for program-wide MEL, there would likely be need for some targeted technical MEL support for implementing partners to ensure that AHCs receive relevant, accessible and timely information to support DFAT’s Investment Monitoring Reporting (IMR) obligations. This will increasingly be important as the program nears completion when a Final Investment Monitoring Report (FIMR) is required.

**Recommendation:**

1. SDV should consider reprioritising the program-wide MEL budget to rationalise implementing partner reporting to AHCs in director support of FIMR reporting, knowledge product development and policy advocacy.

# Conclusion

SAWASI was designed as a regional program to inculcate WSC approaches in South Asia. In practice, it has been a multi-country (India, Pakistan and Nepal) funding mechanism administered by DFAT’s SDV Section and managed by the AHCs in the partner countries. CDP projects in India and Pakistan have applied good practice community development and technical water and sanitation approaches. Implementation in Pakistan is on track but is delayed in India. Both CDPs face challenges in moving from implementation to replication/scale-up in order to justify investment by the Commonwealth in ‘demonstration’ projects. The TA in all three countries has been highly relevant to national counterpart priorities, but has been implemented without reference to the CDPs, and only minimally include reference to WSC approaches. There has been limited visibility for DFAT’s diplomatic purposes in some countries so far but this could be better supported in the remainder of the program. While the individual TA investments have achieved potentially strategic results, the discrete approach to implementation diverges from the original intent of the SAWASI design and is therefore a missed opportunity to amplify the value of the CDPs and/or the promotion of WSC at scale. In retrospect, the requirement to require in-country implementing partners to engage Australia-based technical partners is in tension with DFAT’s locally-led development policy, and resulted in a situation in which five Australian engineering consultancies were engaged to provided broadly the same expertise into the region. In circumstances where implementation ultimately involved five disparate investments in three countries, the purpose and value of a regional learning workshop was eroded. Many of the regional program’s challenges may be traced to a decision not to engage an entity to provide overall management of coherence and collaboration. The management and governance vacuum was instead left to SDV in Canberra (1.5 FTE)—a motivated and capable team, but not resourced to manage a complex technical regional program. An overall MEL provider was engaged, but the MEL arrangements have not been fit-for-purpose.

In conclusion, SAWASI has resourced development investments in three South Asian countries that have generated locally-relevant value in the water and sanitation sector, but have diverged from the intent of the approved regional program design.

# Appendix A: Interviewees

| **Program focus** | **Name** | **Organisation** | **Date** |
| --- | --- | --- | --- |
| SAWASI | Iris Yam | DFAT, South and Central Asia Development Section | 6/05/2024 |
| SAWASI | Lizzy Jenkins | DFAT, South and Central Asia Development Section (previously) | 7/05/2024 |
| SAWASI | Bilal Akbar | DFAT, Assistant Director of the Water Security Section (previously) | 14/05/2024 |
| SAWASI | Dipti Lata | OPM | 14/05/2024 |
| SAWASI | Durre Mahmood | OPM | 14/05/2024 |
| SAWASI | Ruhi Saith | OPM | 14/05/2024 |
| SAWASI | Scott Bayley | OPM | 14/05/2024 |
| SAWASI | Vinaya Padmanabhan | OPM | 14/05/2024 |
| SAWASI | Pam Rugkhla | DFAT, Gender Equality, Disability, and Social Inclusion Branch | 15/05/2024 |
| SAWASI | Matt Lapworth | DFAT, South and Central Asia Development Section | 20/05/2024 |
| SAWASI | Claire Bowyer | DFAT, South and Central Asia Development Section | 21/05/2024 |
| SAWASI | Tony Wong | Monash University | 23/05/2024 |
| SAWASI | Fiona Chandler | Alluvium | 9/07/2024 |
| SAWASI | Tarika Gulati | Alluvium | 9/07/2024 |
| AIWASI | Anand Singh | DFAT, India post | 15/05/2024 |
| AIWASI | Belinda Costin | DFAT, India post (previously) | 15/05/2024 |
| AIWASI | Emily Megow | DFAT, India post | 15/05/2024 |
| AIWASI | Nagasreenivas Kanchi | DFAT, India post | 15/05/2024 |
| AIWASI | Barry Chisholm | ARUP | 16/05/2024 |
| AIWASI | Gaurav Bhatt | ARUP | 16/05/2024 |
| AIWASI | Geeta Sandal | ARUP | 16/05/2024 |
| AIWASI | Sian Harrick | ARUP | 16/05/2024 |
| AIWASI | Julian Storm | DFAT, India post | 27/05/2024 |
| AIWASI | CDP Consortium | CDP Consortium (WRI, NIUA, MCGC, MHT) | 27/05/2024 |
| AIWASI | Delhi Water Forum | Delhi Water Forum members | 27/05/2024 |
| AIWASI | Dr. Alok Singh | Municipal Corporation of Delhi (MCD) | 27/05/2024 |
| AIWASI | Mr. Anil Bharti | Delhi Jal Board (DJB) | 27/05/2024 |
| AIWASI | Bakkarwala Community | Bakkarwala Community Members (RWAs and CAG’s and Community Water Forum (CWM)) | 28/05/2024 |
| AIWASI | Mubarakpur Dabas Community | Mubarakpur Dabas Community Members (RWAs and CAG’s and Community Water Forum (CWM)) | 28/05/2024 |
| AIWASI | D. Thara | AMRUT, MoHUA | 29/05/2024 |
| AIWASI | Ms Tanvi Garg | General Vista Division, MoHUA | 29/05/2024 |
| AIWASI | Deepu Tom | MoHUA | 29/05/2024 |
| AIWASI | Ms Usha Garg | KPMG | 29/05/2024 |
| AIWASI | Sudeep Roy | Town and Country Planning, MoHUA | 29/05/2024 |
| AIWASI | Jaya Dhindaw | WRI | 29/05/2024 |
| AIWASI | Prerna Mehta | WRI | 29/05/2024 |
| AIWASI | Dr Sandeep Kulshrestha | Delhi Jal Board (DJB) | 30/05/2024 |
| AIWASI | Mr. Anil Tyagi, CE | Municipal Corporation of Delhi (MCD) | 30/05/2024 |
| AIWASI | Dinesh Saini | Haryana State Government | 30/05/2024 |
| AIWASI | Rakesh Kumar | Haryana State Government | 30/05/2024 |
| AIWASI | Sayed Ali | Haryana State Government | 30/05/2024 |
| AIWASI | Sanjay Arora and Team | NDMC | 30/05/2024 |
| AIWASI | Gurjit Singh Dhillon | AMRUT, MoHUA | 31/05/2024 |
| AIWASI | Isha Kalia | AMRUT, MoHUA | 31/05/2024 |
| AIWASI | Lavanya Kumar | AMRUT, MoHUA | 31/05/2024 |
| APWASI | Abu Rehan | DFAT, Pakistan post | 13/05/2024 |
| APWASI | Guleena Khan | ASI | 13/05/2024 |
| APWASI | Tanya Khan | ASI | 13/05/2024 |
| APWASI | Nicole Guihot | DHOM - Australian High Commission to Pakistan | 3/06/2024 |
| APWASI | Farah Nadeem and others | WWF | 3/06/2024 |
| APWASI | Dr Mohsin Hafeez | International Water Management Institute (IWMI) | 3/06/2024 |
| APWASI | Mr Muhammad Dilshad | Pakistan Council for Research and Water Resources | 3/06/2024 |
| APWASI | (many) | James Town CBO and VO representatives | 4/06/2024 |
| APWASI | (many) | Farash Town CBO and VO representatives | 4/06/2024 |
| APWASI | Sanam Khan | DFAT, Pakistan post | 4/06/2024 |
| APWASI | Muhammad Haseeb | Water and Sanitation Authority (WASA) | 4/06/2024 |
| APWASI | Sardar Khan Zimri | Capital Development Authority (CDA) | 4/06/2024 |
| APWASI | Ahmed Kamal | Federal Flood Commission | 4/06/2024 |
| APWASI | Zeeshan Bilal and Souman Khalid and others | WASA Lahore and Housing, Urban Development and Public Health Engineering Department | 5/06/2024 |
| APWASI | Kamran Rafique, Gauhar Rehman and others | MMP | 6/06/2024 |
| APWASI | Abid Hussainy and others | Urban unit | 6/06/2024 |
| APWASI | Stephanie Werner | DFAT, Pakistan post | 7/06/2024 |
| APWASI | Alessandra Razera | HARC | 11/07/2024 |
| APWASI | Matthew Hardy | HARC | 11/07/2024 |
| ANWASI | Mr Birat Gyawali | Department of Water Resources and Irrigation (DoWRI) | 8/05/2024 |
| ANWASI | Dr Kapil Gnawali | Water and Energy Commission Secretariat (WECS), Government of Nepal | 10/05/2024 |
| ANWASI | Mr Ashish Karki | Nepal Water Supply Corporation (NWSC) in Pokhara. | 10/05/2024 |
| ANWASI | Dr Sagar Prasai | Water Governance Advisor (The Asia Foundation) adviser to AHC | 14/05/2024 |
| ANWASI | Kavitha Kasynathan | DFAT, Nepal post | 14/05/2024 |
| ANWASI | Sofila Vaidya | DFAT, Nepal post | 14/05/2024 |
| ANWASI | Advait Madav | Alluvium | 9/07/2024 |

# Appendix B: Key Evaluation Questions

| **Lines of Inquiry** | **Investment Foci** | **DAC Criteria** | **Detailed Questions** | **Informants/Source** |
| --- | --- | --- | --- | --- |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO1 | Relevance | To what extent is SAWASI responding to beneficiary community needs? | * Beneficiary communities * Government counterparts * Documents |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO1 | Relevance | To what extent is SAWASI aligned with development priorities of Australia and partner jurisdictions? | * Government counterparts * DFAT * Documents |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO1 | Effectiveness | To what extent are target communities discerning benefits from WSC initiatives in relation to access to safe water and reduced vulnerability to climate impacts? | * Beneficiary communities * Government counterparts * Implementers * Informed third parties |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO1 | GEDSI | To what extent has SAWASI addressed barriers to inclusion and enabled women/girls, PWD and other marginalised groups to gain better access to safe water? | * Beneficiary communities * Government counterparts * Implementers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO1 | Sustainability | What evidence indicates that target communities will continue to implement WSC approaches? | * Beneficiary communities * Government counterparts * Implementers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO2 | Effectiveness | To what extent have counterparts learned and are using WSC approaches? | * Government counterparts * Implementers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO2 | Effectiveness | What benefits have flowed to city-level governments from exposure to WSC? | * Government counterparts * Implementers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO2 | GEDSI | To what extent has SAWASI contributed to improved awareness or increased actions among counterparts in relation to mainstreaming GEDSI? | * Government counterparts * Implementers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO2 | Sustainability | What evidence suggests that counterparts will extend/scale-up WSC approaches? | * Government counterparts * Implementers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO3 | Effectiveness | What evidence indicates that TA has met the needs of counterparts? | * Government counterpart * Technical Advisers |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO3 | Effectiveness | What particular value do counterparts place on Australian expertise? | * Government counterpart * Technical Advisers * Informed third parties |
| Progress towards EOPOs? (primary emphasis of MTR) | EOPO3 | Sustainability | What enduring capacity has TA established? To what extent has TA provided a capacity substitution function versus a capacity building function? | * Government counterpart * Technical Advisers * Informed third parties |
| Merits of modality & governance?  (secondary emphasis of MTR) | Management | Efficiency | To what extent have the management and governance arrangements been appropriate? | * Implementers * Technical Advisers * Government counterpart |
| Merits of modality & governance?  (secondary emphasis of MTR) | Management | Efficiency | What factors have influenced the timeliness of implementation? (CDP, learning workshops & TA) | * Implementers * Technical Advisers |
| Merits of modality & governance?  (secondary emphasis of MTR) | Management | Efficiency | To what extent have the modality and implementation approaches promoted value-for-money? | * Implementers * Technical Advisers * Government counterpart * DFAT |
| Merits of modality & governance?  (secondary emphasis of MTR) | Management | Efficiency | To what extent has SAWASI coordinated with other donors and other sector partners (including other DFAT investments and TA)? | * Implementers * Technical Advisers * DFAT |
| (Merits of modality & governance?  (secondary emphasis of MTR) | M&E | M&E | What have been the merits and challenges of having a M&E provider contracted separately from implementers? To what extent have the M&E arrangements supported QA and learning? | * Implementers * DFAT |
| Merits of modality & governance?  (secondary emphasis of MTR)? | M&E | M&E | To what extent has M&E information been credible and informed program decisions and improvements? | * Implementers * DFAT * Government counterpart |
| Merits of modality & governance?  (secondary emphasis of MTR) | M&E | M&E | What key lessons have been learned including from previous programming? | * Implementers * DFAT * Government counterpart |
| Implementation achievements and lessons? (tertiary emphasis of MTR) | Learning | Effectiveness | To what extent has the program logic remained relevant and informed programming? | * Implementers * DFAT |
| Implementation achievements and lessons? (tertiary emphasis of MTR) | Learning | Effectiveness | What key assumptions have held or been challenged? | * Implementers * DFAT |
| Implementation achievements and lessons? (tertiary emphasis of MTR) | Learning | Effectiveness | What aspects of SAWASI are deemed especially successful? | * Implementers * DFAT * Technical Advisers * Government counterpart |
| Implementation achievements and lessons? (tertiary emphasis of MTR) | Learning | Climate change | How might SAWASI more actively address climate change risks? | * Implementers * DFAT * Technical Advisers * Government counterpart |
| Implementation achievements and lessons? (tertiary emphasis of MTR) | Learning | GEDSI | To what extent has SAWASI actively addressed GEDSI risks? | * Implementers * DFAT * Technical Advisers * Government counterpart |

# Appendix C: AIWASI Findings

## Introduction

The *South Asia Water Security Initiative* (**SAWASI**) is a development investment by Australia’s Department of Foreign Affairs and Trade (DFAT) (2021-25), implemented in India, Pakistan and Nepal and managed from Canberra[[57]](#footnote-58). SAWASI was designed with the goal of ‘*improving access to safe water and sanitation services for disadvantaged communities in South Asian cities’* by aligning with Australia’s Water Sensitive Cities (WSC) approach.[[58]](#footnote-59)

A mid-term review (MTR) of SAWASI included field visits in India and Pakistan and found that the program had been implemented differently in each country. These differences warranted country-specific findings in addition to overall regional program findings. This annex provides the findings from the MTR that are specific to the *Australia-India Water Security Initiative* (**AIWASI**).

## The WSC Approach

The design and the MEL Plan define WSC as an ‘approach’, which involves ensuring that:

* The area serves as a potential water supply catchment, providing different water sources for a range of uses.
* There are ecosystem services and a healthy natural environment available to communities.
* Communities are informed about WSC and are actively engaged in decision making about their water resources.

Progress towards becoming a WSC is measured along a series of six stages.

AIWASI involves three components:

1. **community demonstration project** (CDP) at two sites in Delhi, Bakkarwala (resettlement colony – approx. 4000 households) and Mubarakpur Dabas (comprising a main village and a non-authorised settlement next door – approx. 4000 households each) and managed by a consortium led by World Resources Institute (WRI) and including McGregor Coxall (McGC), Mahila Housing Trust (MHT) and the National Institute of Urban Affairs (NIUA);
2. **learning workshops** at the city-level through the Delhi Water Forum (DWF) (a forum of city-level water management stakeholders established by the CDP consortium) and at the regional-level through the SAWASI regional workshop held in Bangkok, (29th-31st August 2023) (organised by Alluvium) as well as study tours to Australia for Government of India (GoI) counterparts and Delhi city officials[[59]](#footnote-60);
3. **technical assistance** (TA) provided by Arup for The *Atal Mission for Rejuvenation and Urban Transformation* 2.0 (AMRUT 2.0) within the Ministry of Housing and Urban Affairs (MoHUA).

The MTR involved around 30 hours of interviews with 24 AIWASI-specific stakeholders based in India and Australia[[60]](#footnote-61), and visits to both project sites, with focus group discussions (FGDs) involving approximately 20 community members at each. The MTR team also engaged with collaborative governance structures established by the project including the Community Water Forums (one in each project site) and the DWF. The MTR focused on assessing the progress made towards the program’s goal and End of Program Outcomes (EOPO) (summarised in the main body of the MTR report) with reference to aspects of the Development Assistance Committee (DAC) evaluation criteria. The findings according to these criteria are presented for AIWASI below.

## Relevance

**The CDP is addressing the priorities of the Delhi city government and key water and sanitation service providers. The completed infrastructure will improve access to water and sanitation services and climate resilience for residents.**

The CDP technical focus is on addressing known water and sanitation issues, water governance and the demonstration of nature-based solutions to build climate resilience[[61]](#footnote-62) in two disadvantaged communities in Delhi which is in line with the priorities of the city government. CDP target communities were selected through a comprehensive process involving various social and technical mapping and analytic exercises[[62]](#footnote-63) and the engagement of the appropriate authorities to ensure that the project sites were relevant.[[63]](#footnote-64) The community engagement process that followed the site selection has ensured a ‘bottom up’ articulation of residents’ needs and the action plan of WSC infrastructure has responded to these identified needs.

**Key concepts of WSC have been applied in ways that are contextually relevant to the CDP.**

The fundamentals of the WSC approach are aligned with government priorities (although, they are not referred to as ‘WSC’ by community stakeholders). WSC concepts were originally developed for a city-wide scale, therefore, the CDP staff (in particular the team from McGC) have downscaled the concepts for adaptation at the community scale and have selectively aligned these with relevant WSC indicators.

**The CDP has brought important water management stakeholders, that were previously siloed, together in the Delhi Water Forum (DWF).**

The CDP has established the Delhi Water Form (DWF) which regularly meets and includes an array of strategic sector stakeholders that have not previously collaborated, in order to seek pragmatic solutions to water and sanitation issues at the city level. Several of the members noted that the DWF brings together government departments, service providers, research and advocacy groups that have mostly been siloed to date.[[64]](#footnote-65) The WSC approach seems aligned with the DWF’s priorities for water and sanitation management with members referring specifically to the WSC concepts and language, seemingly as a result of the WSC-focused learning workshops.

*“In India, there are agencies who take care of each of the pillars defined in WSC. The purpose of the DWF is to bring these agencies together to work in a less siloed approach. […] We have a realistic outlook: we’re not going to achieve things in 3-4 years. But we feel like the ice has been broken and some sort of cooperation between the agencies has started which is great.”* - *Delhi Water Forum member*

**The TA is closely aligned with the GoI’s goals for water management and is highly regarded by GoI counterparts.**

The TA is contributing to the GoI’s water, sanitation and urban reform scheme (AMRUT 2.0)[[65]](#footnote-66). India has adopted a ‘mission approach’ within the MoHUA to accelerate the creation of city infrastructure and associated urban reforms to promote water security, sewage and wastewater treatment, its reuse, and solid waste management services. There is a series of missions run by the MoHUA to implement various components of these urban reforms, of which AMRUT 2.0 is one. [[66]](#footnote-67) A small team of TA (backstopped by an Australia-based technical consulting company, Arup) situated within MoHUA supports an Additional Secretary and several directors with responsive and high-quality advice aligned with their AMRUT 2.0 key performance indicators.

The WSC approach is not explicitly part of the TA, though fundamentals are broadly aligned with AMRUT 2.0 objectives (urban water and sanitation are priorities of AMRUT 2.0). The TA, particularly the ‘handholding’ component of this work, is highly regarded by government counterparts who have requested more of this kind of support, including face-to-face training.

**The CDP and TA are supportive of Australian and Indian priorities, though to date there has been limited profile for Australia.**

At conception, SAWASI was aligned with DFAT’s *South Asia Regional COVID-19 Development Response Plan* (CRP), and it remains aligned with DFAT’s policy focus on climate resilience and regional stability. It is consistent with the *Australia-India Memorandum of Understanding on Water Cooperation (2020)* within the *Australia – India Comprehensive Strategic Partnership*. SAWASI is also aligned with the priorities of the GoI—indeed improving water and sanitation services is a Prime Ministerial priority. The CDP, particularly when infrastructure components are completed, affords the Australian High Commission (AHC) with public diplomacy material and opportunities for official visitation. It also demonstrates the work the AHC is doing to contribute to DFAT’s gender equality, disability and social inclusion (GEDSI) and climate resilience policy priorities.

Though Australia’s investment through AIWASI is very small in comparison to the scale of GoI investment in the sector, it is considered to have been instrumental in leveraging the larger GoI investment. Further, the TA and the CDP are together engaged at all levels of the sector, within a domain acknowledged to be politically important (a prime ministerial priority).[[67]](#footnote-68) Hence, there is potential for the AHC to develop better strategic ties with GoI on the basis of AIWASI achievements (see below). However, to realise this potential, it needs to be nurtured as CDP infrastructure investments are finalised, by creating synergies between CDP and TA stakeholders and establishing inter-sectoral linkages.[[68]](#footnote-69) The MTR team was informed that the Director of Development Cooperation (AMRUT 2.0) has briefed the Minister regarding Australia’s contribution—particularly the study tour[[69]](#footnote-70) that took government counterparts to Adelaide, Melbourne and Sydney to learn about Australian water management best practice. It provided knowledge and technology exposure to GoI counterparts and city officials from 18 Indian States that has helped them to implement urban reforms under the AMRUT scheme[[70]](#footnote-71). Such contributions by AIWASI could arguably be better leveraged by the AHC.

## Effectiveness

**The CDP has established strong collaborative water governance platforms**

The CDP has established or reinvigorated collaborative governance platforms at block, community and city levels through the Community Action Groups (CAGs), [[71]](#footnote-72) Community Water Forums and DWF. In Bakkarwala (a resettlement colony) the CDP re-invigorated the existing women’s groups and included men to form the CAGs, whilst in Mubarakpur Dabas, the program strengthened the existing Residents Welfare Association (RWA) in the urban village and established a new CAG in the adjacent settlement, facilitating cooperation between these two groups. The CAGs are successfully communicating with relevant local service providers to have some of their household water and sanitation needs met. Whilst water and sanitation needs were the focus of the CDP capacity building, the CAGs have also advocated for broader community needs, for example, public street lighting and solid waste collection.

*“Before, we did not know anyone from the local government. Nowadays, we contact the JEE from MCD directly and get our issues resolved (e.g. provision of water tanker for Roop Vihar which does not get piped water). We have made a written submission for the restoration of the existing piped network. We also met the local MLA (member of the State Legislative Assembly) Delhi Water Forum member to talk about our issues.”- CAG President, Mubarakpur Dabas settlement*

At the city level, the DWF provides both ‘vertical’ communication through the representation of the CAGs and horizontal communication between a range of government departments, non-government citizen bodies and academia/advocacy bodies. It has produced a WSC baseline and compendium of good practices on water security.

**Capital works promise to improve access to WASH services and improve climate resilience**

Delays in implementation have meant that, at the time of the MTR, capital works had only just commenced; hence it was not possible to assess the technical merit of all of the proposed investments. However, CAG members reported that residents have expressed appreciation for works and improved services that are now in place, such as the accessible features of the reinvigorated public park (that previously flooded for long periods), water meters and the higher frequency of water tankers visiting the communities (as a result of advocacy with service providers and use of complaints management system (MCD 311) by the CAGs). The project has also built community capacity in relation to climate issues by carrying out a series of activities such as the Tree Census[[72]](#footnote-73) and tree planting in public places, composting of household waste and reuse of wastewater etc.

**The TA is helping to unlock GoI funding for cities, thereby expanding water and sanitation services**

The principal contribution of the TA in relation to AMRUT 2.0 has been provision of support for wastewater recycling and rejuvenation of water bodies[[73]](#footnote-74) in Indian cities. The TA performs two main roles: 1) to deliver agreed packages of technical work (including learning materials and guidance notes); and 2) to facilitate ‘hand holding’[[74]](#footnote-75) of City and State administrations to assist compliance with AMRUT 2.0 requirements thus unlocking the significant GoI AMRUT 2.0 funds available for investment in water and sanitation infrastructure.

As noted, the investment in TA is relatively small when compared to GoI investment in the sector but is highly regarded by key stakeholders within AMRUT 2.0—most notably the Additional Secretary and the team of directors. Technical inputs—provided by the Australia-based contractor Arup—are well appreciated, along with other TA teams. The MTR team formed the view that the critical success factor derives from the tactical ways of working of the individuals who deliver technically sound advice in a timely and reliable form that is accessible to political/policy stakeholders. In brief, they have astutely engendered the trust of key AMRUT 2.0 decision-makers.[[75]](#footnote-76)

The substantive value of the TA derives from ‘hand holding’ support deployed predominantly in two states (Delhi and Haryana, and 93 associated cities) that is evidently key for the release of AMRUT 2.0 funds for water and sanitation infrastructure. In this regard, the DFAT-funded TA is providing valuable leverage to improve services that are fundamental to advancing India’s achievement of its Sustainable Development Goals (SDGs). The TA effectiveness has evolved over two years in terms of delivery modality (agreed packages of work, and time-responsive technical support to GoI and Indian States) and demonstrates value-for-money. Some of the reported outcomes achieved through the AIWASI TA are:

* Reviewing around 3400 water body rejuvenation projects submitted by 11 States with a budget of AUD 1 billion.
* Directly supporting two Indian States (Delhi and Haryana) by assisting compliance with AMRUT procedures, thereby unlocking AUD 759 million worth of water and wastewater projects.

Interviewees acknowledged that whilst they valued having direct access to information about international best practice through the TA, there was no specific value in the fact that the TA is resourced by Australia (or in some cases involves Australian expertise); and is arguably only peripherally related to promoting WSC approaches in India. However, the AIWASI TA has demonstrated technical leadership on wastewater and water body rejuvenation that has distinguished the AIWASI TA from other TA. The AMRUT 2.0 representatives appreciated the support from the TA to accelerate the delivery of projects under the mission by bridging gaps in State/City capacity, the adoption of appropriate tools and technologies for different sized cities, and access to knowledge on international best practices and its adaption to the local context.

## Efficiency

**Whilst the composition of the CDP consortium has contributed to some efficiencies, the CDP implementation is significantly behind schedule**

Whilst the consortium partners are staffed with qualified and motivated staff, and the MTR team witnessed positive engagement with community representatives, the CDP is significantly behind schedule. This is apparently due to the institutional complexity noted above, which has delayed approval processes for the technical inputs. For example, there was a lack of clarity in land ownership amongst the local government agencies/departments that delayed the public green space developments. The MTR team particularly noted the political, policy and institutional complexity in the national capital required to coordinate project implementation. Adding to the complexity, there are 14 relevant government institutional stakeholders at national, state and city levels.

It may also be due in part to the level of detail, rigour and thoroughness applied to the community engagement activities and formative research undertaken by the consortium.[[76]](#footnote-77) The consortium reported a wide array of reasons for delays, including the COVID pandemic, changes in the political landscape involving the Delhi Government and resolution of jurisdictional issues over land ownership. Furthermore, whilst Australia-based McGC’s technical expertise was highly valued by the consortium, the requirement to contextualise technical solutions to the local contexts led to some inefficiencies. The engagement of an Australian technical partner was a requirement of the grant.

On the other hand, WRI and MHT have a significant history of collaboration, and this may have contributed to slightly improved implementation efficiency through clearly understood delineation of responsibilities. NIUA is a well-networked organisation housed within MoHUA, and this seemingly streamlined the process of establishing the DWF. The MTR team formed the view that while the CDP has developed sound ‘social capital’, further delays to the delivery of infrastructure risks undermining the ability of the CDP to demonstrate the benefits of WSC concepts and approaches and position counterparts to enable replication/scale-up beyond the implementation period. A no-cost extension may be needed to ensure that all agreed (capital) works can be completed.

**Whilst the TA has provided value-for-money, the TA contract management has been challenging from DFAT’s standpoint and there has been minimum upstream visibility to generate diplomatic value for the AHC**

*“I completely trust the TA – I can give them tasks and sleep at night knowing it will get done by the morning.” -* AMRUT Additional Secretary *CAG, President, Mubarakpur Dabas settlement*

AIWASI’s current TA team from Arup is highly regarded by the decision makers and managers in MoHUA for providing timely and effective technical support. Evidently, earlier formulations were less successful, in one case resulting in an AMRUT 2.0 Director requesting removal of a TA, so it is reassuring to see that the program has been able to be flexible enough to change the TA arrangement and that this iteration of TA is well received by GoI counterparts. Arup TA along with other donor funded TA groups serve a pool of technical experts for the AMRUT Mission 2.0 to work with GoI and State/City Governments to unlock AUD 12 billion to strengthen its water network, wastewater treatment and rejuvenation of water bodies. However, although the TA has established its credibility and is applauded by the senior management involved in AMRUT 2.0, its upstream visibility has been minimal and so has not generated sufficient diplomatic value to date for the AHC to engage with GoI Ministers and the office of the Prime Minister.

Furthermore, there have been inefficiencies regarding the contract management of the TA. Arup was contracted by DFAT from a pre-procured Technical Advisory Group (TAG) panel established prior to implementation. Being a new player, Arup has had limited understanding of DFAT’s requirements and of the implementation context in India and this has led to management challenges. Invoicing by Arup has been deemed problematic by DFAT managers, in part due to an irregular inputs-based service order which seemingly enabled invoicing based on time/inputs rather than outputs. This necessitated a contract amendment and a partial change of working arrangements including agreed annual work plans.

The issue of value-for-money is complex and largely rests with DFAT moving forward. On one hand, the Arup contract represents a high cost to the SAWASI budget. On the other hand, the model over the past nine months has become highly regarded by Mission Directors due to the intensity and responsiveness of TA inputs—and the associated unlocking of significant AMRUT 2.0 funding in target states/cities. Hence, ‘value’ from this investment will only accrue to Australia insofar as DFAT is able to elevate its contribution to AMRUT 2.0 for political/diplomatic benefit—necessitating wider engagement by DFAT beyond the technically focused program managers.

**Management of AIWASI involves a tension between micro-management and risk-management and there is no overall governance mechanism**

Locally engaged staff (LES) at the AHC are qualified, experienced, and highly engaged in project implementation. The MTR team determined that this was an appropriate risk management approach for DFAT in circumstances where there is limited technical capacity available in the Department more broadly and the Monitoring and Evaluation contractor had limited scope/resourcing (see below). In some instances, DFAT’s engagement in CDP implementation may be characterised as ‘micro-management’, though DFAT staff contend that such steps have been a necessary risk management strategy in the face of delays and cost blow-outs. Further, consortium members affirmed the technical inputs of DFAT staff. Nevertheless, at this point DFAT is essentially directing project implementation, potentially blurring donor-implementer lines.

*“We’re working on the CDP which is effectively the demand side. AMRUT is the provider side. So, any tech support for either of these are going to be different. That’s why there’s not more connectivity or synergy between the tech support on both sides.” - India post staff*

There were no governance arrangements in place to oversee the CDP[[77]](#footnote-78) or the TA. Though, as noted above, DFAT program managers at the AHC are highly/routinely engaged with both the CDP consortium and the TA—for example the former First Secretary undertook quarterly meetings with the Director of Development Cooperation in AMRUT 2.0. AHC may consider establishing a strategic governance mechanism over the remainder of the investment as a way to elevate Australia’s contribution by the CDP and TA towards GoI priorities, and to promote replication/scale-up. This might also include considering building more strategic links between the CDP and TA components of the project to leverage and mainstream the good practices and lessons learned in both components of the program.

## Sustainability

**There are currently encouraging prospects for localised sustainability of CDP infrastructure, e.g. handover of infrastructure to municipality.**

Significant infrastructure works are yet to commence in the CDP communities (although the accessible park upgrade in one community has been completed); hence it is difficult to gauge the sustainability prospects from a technical quality standpoint. Nevertheless, some of the completed infrastructure (e.g. the park) has been handed over to the municipality who have taken over its management.

*“The intervention has been led by the consortium with the approval of MCD, but maintenance of the CDP infrastructure is now transferring to the MCD. […] For example, we [MCD] have a fulltime gardener onsite at the refurbished public park as part of operations and maintenance to make sure people don’t dispose of their garbage there anymore.” - MCD Representative*

**The sustainability of community-level and city-level governance mechanisms is promising, but unclear.**

The main achievements of the CDP to date have been the establishment of the community-based governance mechanisms. CAG members (especially women) expressed value in having a platform for the first time on which to raise community issues with government service providers. While the formation of community fora to raise service issues is not uncommon in international development, the sustainability of the CAGs appears to lie in the reward of service providers *actually responding* to issues raised—itself a function of political pressure but also resourcing by the project. Hence, it remains somewhat uncertain if CAG engagement will be sustained beyond resources provided by the implementing consortium.

*“Whilst it was difficult to maintain our motivation early on, the cause [water supply to the city] of the forum is motivating for us to continue.”* - *Delhi Water Forum member*

*“Without the forum it’s easy to fall into blaming other departments/stakeholders for our failures, whereas active engagement in the forum facilitates our shared responsibility.” - Delhi Water Forum member*

In a similar vein, members of the DWF reported unique value in being convened to collaborate on common sector challenges in circumstances where their respective institutions ordinarily blame-shift on sector shortcomings.[[78]](#footnote-79) The NIUA has not yet developed a transition strategy to maintain the development gains achieved so far and to extend this work (networking, inter agency collaboration, and knowledge management within Delhi and across Indian cities where it operates).

While DWF members acknowledged that, as voluntary participants, maintaining motivation/engagement in the forum can be challenging, there is also tacit value in networking and associating with other DWF members on strategic sector issues. In this regard the formation of the DWF appears long over-due and highly significant. The involvement of the NIUA may be critical to the sustainability of the DWF given its wide networks in Delhi and 61 other cities across India, and the fact that hosting the DWF is consistent with its wider mandate.

**The replication/scale-up pathway for the CDP is unclear at this point**

While the comprehensive analyses and mapping processes undertaken by the CDP consortium may be argued to reflect good practice, a pragmatic reality is that such detailed processes are unlikely to be taken up by other stakeholders—particularly government agencies—thereby eroding any replication/scale-up agenda. Instead, what is required is the formulation of a clear model or package of interventions that—while evidence-based—are nonetheless efficient to deploy.

The major concern in relation to sustainability arises from the fundamental agenda of SAWASI, which relates to ‘demonstrating’ successful water and sanitation innovations (i.e. promoting WSC) for replication and/or scale-up. While achievement of replication or scale-up is beyond the scope of AIWASI, the *positioning for* replication/scale-up is fundamental. This will require the proactive engagement of key ‘audiences’ for the ‘demonstrations’ and clear articulation of the pathways for replication/scale-up, including full documentation of resources/knowledge products (e.g. standard operating procedures (SOPs), policy briefs etc).The evaluation team was not advised of any coordination or collaboration with other sector donors or programs for knowledge management and exchange. The previous DFAT First Secretary advised that there had been discussion about a donor coordination and that this should be a priority moving forward.

Of note, a tenet of the SAWASI design was the integration of CDP and TA projects such that synergies would inculcate WSC approaches in India. While program staff at the AHC mounted compelling arguments for why the TA and CDP projects had been implemented discretely[[79]](#footnote-80), moving forward, there is a growing case for linkages to be fostered. The MTR had two directors of AMRUT 2.0 spontaneously request DFAT support for information about or examples of successful innovations at the community level—precisely the focus of the CDP. Further, the best hope for CDP scale-up lies in socialising successes within AMRUT 2.0.

*“I don’t know about the CDP, but for my work, I do need more information about how to service smaller cities e.g. 40 000 people where decentralised STPs are needed.” - AMRUT Director, MoHUA*

**The TA has contributed to significant upscaling of water and sanitation services, particularly in two states, but in its current form is unsustainable**

The TA is inherently unsustainable insofar as when contracts expire and funding ends, TA services will cease. Further, while the AHC is appreciated (by those who know, e.g. the Director of International Cooperation) for resourcing the TA, the MTR team was informed that it could be sourced through other channels. Arguably, this erodes the political rationale for DFAT’s investment unless more can be done to elevate the subtle but important role Australia has played in supporting AMRUT 2.0.

Further, the TA is not delivering substantive capacity development dividends which might leave a residual benefit (despite providing selective online training materials to government counterparts, they would prefer on-the-job or face-to-face training). In this sense, the role of the TA is ‘capacity supplementation’. The AMRUT 2.0 informed the MTR team that the TA support for ‘hand holding’ partner states/cities offers greater value than capacity building. The Director also requested additional TA resources—specifically in relation to clean drinking water.

In essence, any argument for sustainability of the TA rests on lasting benefits to communities/households arising from increased access to improved water and sanitation services—i.e. the sustainability of AMRUT 2.0 investments supported by the TA. In this vein, Australia has made a small but substantive contribution to a massive upscaling of water and sanitation service delivery which should enable population-wide public health benefits in perpetuity. As stated above, the TA team has supported Delhi and Haryana States to unlock AUD759 million to strengthen water sanitation services and rejuvenation of lakes benefiting over 22 million people. DFAT may consider elevating and celebrating this contribution for diplomatic/political benefit (see recommendations).

## Gender Equity, Diversity and Social Inclusion

**The CDP has fostered the empowerment of women to participate meaningfully in community-level management.**

*“We discuss problems among ourselves now. The consortium has boosted our confidence to approach the Government with our issues. We have made applications to the government/service providers to get things in our community fixed. Now, when we make a complaint, the MCD brings a tanker. Our water pipes aren’t fixed yet, but water access has improved because of the tankers.” - Women CAG members, Bakkarwala*

The main benefit to women—and perhaps people with a disability (PWD) —delivered through the CDP seems to involve: 1) bringing women and men together through the CAGs to co-manage their collective issues; and 2) building women’s confidence to advocate for—and manage—their particular WASH needs. In Bakkarwala, the CAG structure existed prior to the project, but there was low attendance and little action, and the bulk of the active members were women, meaning that the burden of the work was disproportionate. Since the CDP, there are more men participating, and women have gained confidence to articulate their needs and advocate for action by service providers. The women members of the CAG gave several examples of making complaints to local service providers through a hotline/App (MCD 311) or writing letters and having a positive response.[[80]](#footnote-81)

In Mubarakpur Dabas, a Resident Welfare Association (RWA) existed to represent the main village, but the membership was entirely men, and women were unaware of its role. Since the CDP started, a CAG has been established to represent the non-authorised settlement next door to the main village, with several women members. Since then, the CAG liaises regularly with the RWA to advocate successfully for residents’ needs with the local government and women in both the main village and the non-authorised settlement next door feel empowered to advocate for themselves through these two groups.

**The CDP has fostered the inclusion of people with a disability (PWD) in community-level management.**

In both project sites, one person with a disability was a member of the CAG and was present for the MTR community visit.

**It is likely that CDP infrastructure is/will benefit women, girls and PWDs.**

Given that access to water is a burden faced disproportionately by women and girls, it is likely that any planned technical inputs such as rainwater harvesting or piped water will contribute to GEDSI outcomes; however, as the project in Bakkarwala has not yet been completed, this benefit has yet to be realised. In Mubarakpur Dabas, parts of the water supply pipeline have been upgraded, water meters have been installed in households (by DJB, through the actions of the CAGs facilitated through the project), and the CAGs have facilitated the installation of extra lighting around the settlement which increases safety and mobility of women and girls.

In Bakkarwala, the local park has been upgraded with Water Sensitive Urban Design features to mitigate flooding following rainfall. As part of the CDP, handrails and ramps were installed to provide accessibility for people with mobility impairments, and the consortium participated in the MCD’s tree census to build awareness of green spaces in the settlement.

**The TA has supported the GoI in their ‘AMRUT Mitra: Women for Water, Water for Women’ scheme.**

The AMRUT Mitra scheme was initiated in February 2024 and is led by the MoHUA to involve women’s Self-Help Groups (SHGs) in water management. This includes activities such as training and paying women’s SHGs to conduct water testing. They also held several networking events during Diwali festival where SHGs were invited to tour their local water treatment plant and hold a market selling their homemade goods to the plant staff. The TA has supported 35 SHGs as part of 13 projects. The GoI issues contracts to SHGs for water testing with contract value of up to ten lakhs Indian Rupees (about 18,000 AUD).

## Recommendations

As a result of the findings of the MTR, the team have made the following recommendations:

* **The program should provide a no-cost extension to the CDP with a clear plan for documenting the replicability and scalability of successful elements of the CDP**. While the AIWASI implementation started in 2021 with a comprehensive engagement and planning process, it ran into delays in implementing capital works. This has meant that there is little time remaining to demonstrate the replicability and scalability of the key elements of the CDP: arguably, the CDP’s original purpose. It has generated strong social capital at the community level which can foster good outcomes with the completion of the planned innovative solutions and the learning thereof should be shared with stakeholders for replication and scale up.
* **The program should employ resources for creating knowledge products e.g. toolkits and their dissemination**. The consortium should consider packaging their work and achievements as deployable knowledge products, together with dissemination plans. The products could be SOPs, toolkits and guidelines for replication along with documentation of the achievements and challenges for replication. These products should be disseminated to water forums, partner institutions and Government representatives, through the CDP and TA counterparts. The AHC could stock-take the plans to produce knowledge products by the consortium and agree on a list of products with a time frame, resources required to produce and disseminate them that runs in parallel to the implementation of the capital works during the remainder of the project life.
* **The CDP should connect with local Disabled People’s Organizations for linkages and sustainability**. The inclusion of PWDs in community-level management structures could be furthered in partnership with a local disabled people’s organisation. This might also lead to extra benefits (beyond merely improved access to WASH) for PWDs in the community.[[81]](#footnote-82)
* **To develop a transition strategy for the DWF to maintain the development gains achieved so far and to extend this work** (networking, inter agency collaboration, and knowledge management within Delhi and across Indian cities). The Delhi City Forum is well positioned in NIUA, a think tank within the MoHUA. It needs to capitalise on the demonstration value of the CDP and the Forum to provide impetus to the CDP-TA linkage and advocacy to extend the approach and lessons to other cities. The plan for the remainder of the project should focus on learning and knowledge dissemination for city wide learning, promoting WSC and creating value for public diplomacy.
* **To carry out regular public diplomacy meetings and events which exhibit the achievements of the CDP and TA to highlight the partnership between Australia and India.** The achievements of the AIWASI program are currently underreported and therefore are not reaching the full potential for policy influence. The AHC program staff should engage with Arup and WRI to promote AIWASI achievements more widely in the AHC and within GoI (for example, through policy and progress briefs for bilateral meetings between HOM and GoI, dialogue to technology collaboration with Australian private sector, and donor coordination).

# Appendix D: APWASI Findings

## Introduction

The *South Asia Water Security Initiative* (**SAWASI**) is a development investment by Australia’s Department of Foreign Affairs and Trade (DFAT) (2021-25), implemented in India, Pakistan and Nepal and managed from Canberra[[82]](#footnote-83). SAWASI was designed with the goal of ‘*improving access to safe water and sanitation services for disadvantaged communities in South Asian cities’* by aligning with Australia’s Water Sensitive Cities (WSC) approach.[[83]](#footnote-84)

A mid-term review (MTR) of SAWASI included field visits in India and Pakistan and found that the program had been implemented differently in each country. These differences warranted country-specific findings in addition to overall regional program findings. This annex provides the findings from the MTR that are specific to the *Australia-Pakistan Water Security Initiative* (**APWASI**).

## **The WSC Approach**

The design and the MEL Plan define WSC as an ‘approach’, which involves ensuring that:

* The area serves as a potential water supply catchment, providing different water sources for a range of uses.
* There are ecosystem services and a healthy natural environment available to communities.
* Communities are informed about WSC and are actively engaged in decision making about their water resources.

Progress towards becoming a WSC is measured along a series of six stages.

APWASI involves three components:

1. a **community demonstration project** (CDP) at two sites, Farash Town (Islamabad) and James Town (Rawalpindi);
2. **technical assistance** (TA) for urban flood prevention and management in Lahore, Punjab Province; and
3. **learning activities** at the city- and regional-levels. CDP stakeholders involved in water management in Islamabad were involved in several city-level workshops. TA stakeholders involved in water management in Lahore were involved in an exposure visit to Australia (September 2023). All stakeholders were engaged in a SAWASI regional workshop held in Bangkok (29th-31st August 2023).

The MTR involved around 18 hours of interviews with 36 APWASI-specific stakeholders based in Pakistan and Australia, which took place both online and in person in Islamabad, Rawalpindi and Lahore. The team also conducted visits to the CDP sites (Islamabad and Rawalpindi) with meetings involving approximately 20 community members at each. The MTR team also engaged with collaborative governance structures established by the project including the Community Based Organisations (CBOs) and Village Organisations (VOs) (one of each at each CDP site) and the City-Wide Partnership. The MTR focused on assessing the progress made towards the program’s goal and End of Program Outcomes (EOPO) (summarised in the main body of the MTR report) with reference to aspects of the Development Assistance Committee (DAC) evaluation criteria. The findings according to these criteria are presented for APWASI below.

## Relevance

**The CDP is responding to known community needs and is aligned with city government priorities.**

CDP target communities were selected through a systematic process led by WWF and involving relevant authorities, informed by WSC indicators. This ensured a needs-based approach to targeting. The CDP technical focus was on addressing known water security issues in disadvantaged communities in two jurisdictions, informed by hydrological analyses conducted by the Pakistan Council for Research and Water Resources (PCRWR) – an organisation housed in the Ministry of Water Resources dedicated to research about water.

According to the CBO representatives, the infrastructure provided by the program (e.g. disability-accessible park, rainwater harvesting (RWH) systems and water filtration systems) are highly regarded by residents. As demonstrations, these do not fully address water and sanitation needs (water tanker deliveries are still required every few days). Further, the technical solutions were proposed by the implementing team, with some consultation fromcommunities. Whilst this is not a major issue in practice, it diverges somewhat from DFAT’s locally-led development policy—a tension more broadly identified in SAWASI in relation to the promotion of WSC. Whilst WSC principles are understood by implementers and some counterparts, they are not necessarily referred to as ‘WSC’ by all stakeholders, some of whom prefer the term ‘Climate Sensitive Cities’.

*“We conducted feasibility studies in James Town and Farash Town, measuring the ground water and hydrological conditions. Our main conclusion was that sub-surface aquifers have little potential to meet demand as well as there being some quality issues. We also assessed the potential for rainwater harvesting to meet the needs of the community and given the 1260mm annual rainfall, we proposed that this project focus on rainwater harvesting.” - Pakistan Council for Research and Water Resources (PCRWR) representative*

**The TA responded to the demand for a hydrological model to help manage critical flooding issues in Lahore.**

The TA in Pakistan was organised differently than in India and Nepal: The Australian High Commission (AHC) put out a request for proposals for TA at the national level and three provincial organisations/authorities responded: one of whom was the successful bidder, the Water and Sanitation Authority (WASA) in Lahore. Lahore is a mega city, accommodating >13,000,000 people, and highly impacted by annual flooding events. Rainfall runoff has increased 1.7-fold over the past 10 years, with a discernible lengthening of the rainy season since 2010[[84]](#footnote-85) and with consequent impacts on households, communities and businesses. These impacts, compounded by absent or ineffectual drainage across the city, are projected to worsen in climate change-related scenarios.

Hence, WASA Lahore submitted a proposal for TA to create a hydrological model of the City of Lahore. Adam Smith International (ASI) was engaged by DFAT as the managing contractor, and in turn subcontracted MMP[[85]](#footnote-86) to supply technical/hydrological inputs. A multi-stakeholder Coordination Committee was established to ensure the ongoing relevance of the TA and foster ownership of the products.

**There is further demand from Lahore city-level stakeholders for a costed action plan/packages based on the hydrological model, but this is beyond the scope of the current APWASI TA.**

The Urban Unit Lahore expressed a desire for the feasibility study to include detailed financial planning and actionable interventions. Packaging information into interventions with related budgets would be helpful for securing funding from various agencies to initiate future projects. This is beyond the ToR of the Pakistan TA; however, discreet, costed potential flood mitigation interventions have been included in the final product of the TA.

**The CDP and TA are supportive of Australian priorities.**

Water sector interventions are aligned with the formerly agreed *Pakistan-Australia Memorandum of Understanding* (MoU). At conception, SAWASI was aligned with DFAT’s *South Asia Regional COVID-19 Development Response Plan* (CRP), and it remains aligned with DFAT’s policy focus on climate resilience and regional stability. The CDP and TA has afforded the Australian High Commission (AHC) with public diplomacy and official visitation opportunities. It enables the AHC to contribute to DFAT’s gender equity, diversity and social inclusion (GEDSI) and climate resilience policy objectives.

**There is potential to further leverage the strategic value of the CDP and TA; thereby further supporting Australian priorities.**

Given the regularity of flooding in Lahore and other Pakistan cities due to heavy and sometimes early monsoons, the TA could provide AHC a basis for strategic engagement with counterparts moving forward. For example, there is strong demand in Karachi and other mega cities with urban flooding issues for similar TA. Furthermore, there is potential to foster synergies between the CDP and TA outputs in Lahore, given that Rawalpindi and Lahore are in the same province (although they are approximately 400km apart), and this could be leveraged to give Australian expertise and support more visibility.

*“Karachi’s drainage problem is ten times worse than in Lahore, so the Karachi Commissioner has expressed interest in the hydrological study.”- Mott MacDonald Pakistan representative*

## Effectiveness

**The CDP interventions are technically sound and are benefitting households in target communities.**

The CDP technical interventions, which include RWH systems, ground water recharge sites, water filtration plants, and public disability-inclusive green spaces, are appropriate and well-regarded by the community and government stakeholders alike. Of particular note was a simple greywater system set up to recycle ablution water at a local mosque for toilet flushing—a system which has relevance for many public buildings.

*“The rainwater tanks were only available for a selection of households which had the potential to create tension within the community, but was managed through 1) a careful, transparent selection process based on greatest need and feasibility and 2) the commitment from households to share water from these tanks.” - HARC representative*

The rainwater tanks are small (1,000 litres) and hence unlikely to meet substantial household needs. WWF has considered larger in-ground tanks shared between households but has not implemented this solution. The MTR team queried the hypothesis that supplying RWH systems to only a selection of households rather than all households would potentially result in tension between households, but this was discounted by WWF and HARC representatives. Not all households could have a RWH system because of physical constraints (e.g. lacking a tin roof) and disadvantaged households were prioritised (e.g. female-headed households). This process was conducted transparently to avoid misunderstandings. Furthermore, the water filtration plants were available to all community members which meant that access to water improved for every resident regardless of whether they had access to RWH.[[86]](#footnote-87) Communal rainwater harvesting systems are intended be installed in the last year of APWASI.

Community Based Organisations (CBO) and Village Organisations (VO) were established to promote community member engagement and ensure relevance and ownership of interventions in the local contexts. The process of formation drew on proven WWF processes in Pakistan and aligns with WSC principles. This, together with water supply infrastructure has provided access to potable water for 24,500 people and strengthened community governance structures for sustainable water management.

A sign on a fence

 A person standing next to a fence



Figure 6 – The photos above shows Mosque full cycle water reuse and recharge system, Farash Town

**The CDP has established apparently strong collaborative water governance platforms.**

Drawing on a model implemented in other cities in Pakistan, WWF established a City-Wide Partnership in Islamabad which includes 68 organisations/stakeholder groups (government, civil society and community representatives) who have interest in the CDP sites. They have held seven sessions so far, which focus on socialisation of the CDP, sharing information about WSC and one GEDSI-focused workshop. WWF see this as a key mechanism for scaling up the CDP to other project sites (beyond the scope of APWASI).

**The TA products will support mitigation of annual flooding in Lahore.**

Key deliverables of the TA included: i) stakeholder consultations report; ii) hydrology report; iii) impact assessment (solutions report); iv) draft feasibility report; v) final feasibility report. All relevant stakeholders, particularly WASA Lahore and the Urban Unit Lahore affirmed the technical quality of the TA, and its uniqueness and importance in the context. Water sector authorities confirmed that the products of the TA will inform city planning, resource allocation for urban flooding and support proactive engagement with donors to address critical drainage issues.

*“The TA has helped the Government of Punjab (GoP) (Punjab) to look at flooding in a wholistic sense which has helped to address the need for medium term planning and to involve broader actors. Furthermore, this TA has introduced Australian best practice; updated topography information and forecasts which are fundamental for future GoP planning and action. Essentially, the TA have provided a clear way forward for the GoP to undertake flood preparedness, possibly with other donors.” - ASI representative*

## Efficiency

**The CDP implementation is on track.**

WWF is on track to complete the project scope within the allocated timeframe and budget. WWF was contracted to implement the CDP, in association with the International Water Management Institute (IWMI), the Pakistan Council for Research and Water Resources (PCRWR) and Hydrology and Risk Consulting (HARC). WWF is regarded by AHC staff as being a responsive implementing partner. With the support of HARC, IWMI played a pivotal role by introducing Nature-Based Solutions (NBS) and contextualising the Water Sensitive Cities (WSC) framework to local communities in Islamabad. Their primary research on runoff and groundwater modelling has significantly contributed to the scientific understanding of water management in the region.

WWF has commenced shoring up sustainability prospects through documenting their technical processes, for example by providing communities with bilingual training manuals for RWH systems, filtration plants and ablution water reuse systems. Furthermore, HARC plans to develop a policy brief on a replication framework. These efforts should be prioritised for the remaining implementation period, in partnership with DFAT and counterparts and should include a clear dissemination and advocacy strategy to promote replication/scale-up.

A person standing next to a machine

 A group of water jugs on a counter



Figure 7 – The photos above are shots of water filtration plant, James Town

**TA implementation is complete.**

The final of five products was delivered by the TA to the AHC and government counterparts after the TA contract concluded, but prior to the conclusion of the MTR. There was no additional cost to DFAT for this. There seemed to be broad satisfaction with the TA products by government counterparts. Several counterparts would have preferred for there to be a fully costed action plan/s based on the hydrological model, but this was beyond the scope of the TA. The Coordination Committee (established to manage the TA) had the role of managing these differences in expectations/desires and overall, there was a positive attitude to this management structure.

**Management arrangements for APWASI are working though there is no overall governance mechanism.**

DFAT staff at the AHC are qualified and highly engaged in project implementation. AHC staff engaged actively in the TA Coordination Committee meetings, and in WWF implementation processes. The MTR team determined that this was an appropriate risk management approach for DFAT given that there was limited technical capacity available in the Department more broadly and there is a high turnover of Australia-based staff. The important links between APWASI and other Australian government programs and projects in Pakistan are being fostered positively by post.

The CDP consortium lead, WWF, is staffed with qualified and motivated staff. The MTR team witnessed positive engagement by consortium members with community representatives.

The TA lead, ASI, was highly regarded for stakeholder consultations and routine liaison with counterparts. However, DFAT encountered challenges in relation to invoicing and progress reporting by ASI. An advance payment before implementation was irregular, and while eventually acquitted, made early progress tracking by DFAT challenging.

MMP was highly regarded for technical capability in producing the substantive output. MMP questioned if greater value/impact might have been generated if their role was more prominent. MMP did not participate in technical exchange visits to Australia or the regional learning workshop in Bangkok with stakeholders. This arguably lessened the focus on WSC and may have curtailed engagement with counterparts. A single firm engaged to deliver ‘hard’ and ‘soft’ aspects of the work may have afforded greater value-for-money, although each partner had strengths in different aspects.[[87]](#footnote-88)

## Sustainability

**Despite currently active CBOs and VOs in both CDP sites, sustainability is likely to depend on government interest and investment and this differs greatly between the two sites.**

In both towns, the CBOs have commenced user fee collection from households to support operations and maintenance (O&M) of water filtration plants which bodes well for sustainability.

In Farash Town, which is relatively close to the centre of Islamabad, the CDA has demonstrated active support of the CDP, for example by providing (and paying for) electricity connections to enable operation of the water filtration plants there. They have also confirmed that in circumstances where community O&M failed, they would step in to support which bodes well for the sustainability of CDP infrastructure there. In addition to this, the land for CDP interventions is allotted by CDA.

In contrast James Town, which falls under the Government of Punjab, is located approximately 5 hours drive from Lahore where the main government agencies responsible for water management are based. However, WASA, Rawalpindi is based within the city. Therefore, the sustainability of O&M in James Town appears wholly dependent on community motivation and organisation and hence could be more vulnerable without institutional/formal support. Further, since land tenure is freehold, infrastructure has been invested on private land ‘donated’ to the community by a Christian pastor, thereby creating an ambiguous asset ownership situation and a hypothetical risk of asset ‘alienation’ from community. In contrast to this hypothetical risk, however, an estimated 90% of the James Town community identifies as Christian, and hence the risk of asset alienation is perhaps conversely low.

Regardless, it may be beneficial for the program to support a visit from Punjab government representatives and service providers based in Lahore[[88]](#footnote-89) (who indicated interest in this during the MTR) to James Town to give the program visibility and to foster cross-learning with the Lahore-based TA, as well as establish relationships with the CBOs and VOs. In retrospect, locating the CDP in disadvantaged areas of Lahore would have enabled stronger synergies both between the TA and CDP but also between the CBOs and government officials to support sustainability. Nonetheless DFAT should foster opportunities for cross-learning over the remainder of the project.

**The scale up of infrastructure in the CDPs depends largely on government bodies and service providers (rather than households) and there is evidence that this is already happening.**

The MTR noted an implied assumption that having demonstrations of RWH systems in each CDP site would inspire other households to do the same, which is otherwise known as ‘diffusion of innovation’[[89]](#footnote-90) across the community. Global WASH sector experience confirms a weak justification for granting selected household WASH systems as inspiration for other households when there are barriers such as high cost, which is the case for these RWH systems. If the RWH systems were combined with a microfinancing intervention (there is capacity for this among the LES at post), then it may be feasible to assume the independent scale up of RWH systems by households.

It is much more feasible that water supply interventions are scaled up when the government manages this process, which is what is happening in Islamabad. The CDA reported that they replicated the RWH systems they saw in Farash Town, in 100 households in other parts of Islamabad. They also indicated an intention to amend bylaws in Islamabad to require all new house constructions to install (RWH) and groundwater recharging technology promoted by the CDP; and promote retrofitting of public buildings.

*“The CDA will introduce new by-laws to require new buildings/houses (with a floor area of greater than 200 square yards) to have a rain catchment and rainwater recharge. Public buildings will be retrofitted with this infrastructure.” - CDA (Islamabad) representative*

James Town (Rawalpindi) does not benefit from the same governance oversight and service delivery as Farash Town (Islamabad), and hence the pathway for replication and/or scale up is less apparent. However, WASA Rawalpindi mentioned that they have begun to replicate the installation of RWH systems in some other projects.

**The TA has enabled water sector authorities to more sustainably manage flooding issues in the future.**

Whilst the technical outputs produced by the TA are highly regarded and of high quality, as with many TA projects, a key risk moving forward concerns the utilisation of the technical products. In circumstances where flooding/drainage issues cut across jurisdictions and technical domains, there is a risk that no single actor will have carriage of recommendations. Therefore, a recommendation of the TA, which needs to be explored further by the Government of Punjab, relates to the establishment of a cross-disciplinary drainage authority, comparable to the Lahore Development Authority.[[90]](#footnote-91) AHC expressed a willingness to advocate with the Government of Punjab in relation to promoting utilisation of the TA output more broadly.

## Gender Equity, Diversity and Social Inclusion

**The CDP has fostered the empowerment of women to participate meaningfully in community-level management.**

The main benefit to women—and perhaps people with a disability (PWD) —delivered through the CDP seems to involve: 1) bringing women and men together through the CBOs and VOs to co-manage their collective issues; and 2) building women’s confidence to advocate for—and manage—their particular WASH needs. At both CDP sites, the CBOs and VOs have equal male/female membership. In Farash Town, the women CBO felt empowered to insist that the men and women meet together (something unprecedented) as a result of the training and support they had received throughout the CDP. During the MTR, the team did not meet any PWDs so it was difficult to assess the level of PWDs in these decision-making structures. Efforts to include PWDs, meaningfully, in decision-making about water management in their communities should be a focus in the remainder of the project.

In Islamabad, the subject of one of the seven City Wide Partnership Forums was on advancing Gender Equality, Diversity and Social Inclusion in Urban Water Management. It would be beneficial to hold at least one more session such as this at the city-level.

*“We would like the relationship with WWF to continue because this project has built our confidence through storytelling. Previously, awareness raising sessions about community issues, especially maintenance of infrastructure, was segregated: men and women separately. But I said that if we are going to properly manage ourselves, then we need to meet together and now the men’s and women’s CBOs sit together.” - Farash Town Women’s CBO member*

**It is likely that CDP infrastructure is benefitting/will benefit women, girls and PWDs.**

Given that access to water is a burden faced disproportionately by women and girls, it is likely that any planned technical inputs such as RWH or the water filtration systems will contribute to GEDSI outcomes. Furthermore, female-headed households and households with people with a disability (PWD) were prioritised for receiving the RWH systems.

The parks in James Town (complete) and in Farash Town (under construction) both have disability accessible features such as ramps and railings (and also women only areas), thereby addressing some of the specific needs of PWDs. Furthermore, the WWF has connected the CBO in James Town to a local Disabled People’s Organisation (DPO) which has led to benefits for PWDs beyond the interventions of the project, such as access to aides, prosthetics and income.

A disability accessible park in James Town with disability access sign on a fence and ramp access to the park. 



Figure 8- The photo above is a shot of the Disability-accessible park, James Town

**The TA undertook some GEDSI-related initiatives**

The specific needs of women, girls and PWDs were considered through separate focus group discussions (FGDs) during the stakeholder consultations (first output of the TA) and these inputs were considered during the modelling.

Furthermore, the TA organisations modelled gender equity in their staffing: ASI was led by two women and the MMP team included a woman on their three-person team.

## Recommendations

**As a result of the findings of the MTR, the team have made the following recommendations:**

* Foster synergies between the CDP and TA outputs in Lahore (Urban Unit, WASA, PHED), given that they are taking place in the same jurisdiction, e.g. by supporting a site visit to James Town. This could be leveraged to give Australian expertise and support more visibility.
* Assess the risk of asset alienation and sustainability of infrastructure in James Town given that there is a lack of government investment there.
* Support CDA’s (Islamabad) plans to amend bylaws to rollout RWH systems and rain recharge systems.
* Efforts to document the successful implementations as part of the CDPs should be prioritised for the remaining implementation period, in partnership with DFAT and counterparts and should include a clear dissemination and advocacy strategy to promote replication/scale-up.
* Consolidate the role and sustainability of the City-Wide Partnership in Islamabad
* DFAT should support WASA to promote the TA products among various funding agencies and donors to secure continued funding for flood mitigation in Lahore, including aspects of the WSC approach.
* Promote the establishment of a cross-disciplinary drainage authority through HOM and the Chief Minister (or some other appropriate mechanism to promote utilisation of the TA output).
* Efforts to include PWDs, meaningfully, in decision-making about water management in their communities should be a focus in the remainder of the project.
* In Islamabad, the subject of one of the seven City Wide Partnership Forums was on advancing Gender Equality, Diversity and Social Inclusion in Urban Water Management. It would be beneficial to hold at least one more session such as this at the city-level.

**Suggestions for future programming:**

* A logical next step for the TA, if there was future funding, would be to put together a costed, action plan/s based on the hydrological model. This action plan could be used to advocate for further funding either from government budgets, or in discreet packages from donors.
* To prioritise locating future program interventions in similar geographic locations. Whilst there were logical reasons for having the CDP and TA in different cities in APWASI (the CDP was established before the request for proposals for TA was disseminated), it would have been more efficient and effective to have all interventions in the same jurisdictions.

# Appendix E: Summary of SAWASI Investments

| **Component** | **India** | **Pakistan** | **Nepal** |
| --- | --- | --- | --- |
| EOPO1  CDPs | CDP locations (both in Delhi Metropolitan City):   * Mubarikpur Dabas * Bakkarwala resettlement colony   Managing Consortium:   * World Resources Institute (WRI) * McGregor Coxall * Mahila Housing Trust (MHT) * National Institute of Urban Affairs (NIUA) | CDP locations:   * James Town, Rawalpindi * Farash Town, Islamabad   Managing Consortium:   * World Wide Fund for Nature (WWF) * International Water Management Institute (IWMI) * Hydrology and Risk Consulting (HARC) | Not applicable |
| EOPO2  Learning Workshops  City Level: | Delhi Water Forum | City-Wide Partnership | None to date |
| Regional Level: | A regional workshop was arranged by DFAT Canberra with assistance from Alluvium | A regional workshop was arranged by DFAT Canberra with assistance from Alluvium | A regional workshop was arranged by DFAT Canberra with assistance from Alluvium |
| EOPO3  TA | TA provided by Arup (SO dated April 2021)  Main Government counterpart:  Ministry of Housing and Urban Affairs (MoHUA) | TA provided by Adam Smith International (ASI) in association with MMP (SO dated 2022)  Government Counterpart is a coordination committee (CC) under the leadership of the Government of Punjab Housing Urban Development & Public Health Engineering Department (HUD & PHED) | TA provided by Alluvium Consulting (SO dated 2024)  Government Counterpart is the Water and Energy Commission Secretariat (WECS). |
| Monitoring and Evaluation | Oxford Policy Management (OPM) | Oxford Policy Management (OPM) | Oxford Policy Management (OPM) |

# Appendix F: GEDSI Findings

The most recent six-monthly report outlines a DFAT gender advisor’s[[91]](#footnote-92) assessment that “*GEDSI is a fundamental objective of the project but was not adequately integrated into the project design*” and that the MEL framework “*did not capture GEDSI-related information beyond disaggregating some indicators into men and women”*.

DFAT’s Design and MEL standards[[92]](#footnote-93) explain that GEDSI indicators, at a minimum, should include:

* The quantity of diverse participants[[93]](#footnote-94) in key program deliverables (outputs)
* The quality of those key program deliverables from the perspectives of diverse participants
* The changes (in knowledge, attitudes, behaviours) that result from key deliverables for diverse participants, and
* Barriers to inclusion in the program activities, outputs and outcomes by diverse participants

The SAWASI MEL framework includes six GEDSI-related indicators:

* CDP: 2 x quantitative measures of participants in activities and 2 x qualitative indicators (from the perspective of the implementers only)
* Learning Activities: 1 x quantitative measure of participants in activities
* TA: 1 x quantitative measures of participants in activities

The following tables presents these indicators.

| **CDP indicators** | **Desired result** | **Indicator (# as it appears in the overall MEL framework)** |
| --- | --- | --- |
| **Intermediate outcome** | Key agencies and informed communities have adopted collaborative governance arrangements | Proportion of community members involved in the governance arrangements disaggregated by gender and disadvantaged status (2) |
| **Output** | Planning documents and implementation arrangements reflect community priorities and visions for water security | Contents of planning documents and implementation arrangements specifically reveal gender or disability related priorities (6) |
| **Activity** | Participatory activities to identify priority issues and develop a community vision for water security in line with WSC and GEDSI principles | Number of community members at participatory activities disaggregated by gender and disadvantaged status (12) |
| **Key Assumption** | Communities (including women, disabled and other marginalized communities) have the capacity and willingness to engage and actively participate in multi-stakeholder governance/decision making | Views of the activity facilitator of capacity and willingness and associated challenges (13) |

| **Regional Learning Workshop indicators** | **Desired result** | **Indicator (# as it appears in the overall MEL framework)** |
| --- | --- | --- |
| **Output** | i. Targeted stakeholders attend ii. Learnings on CDPs shared iii. Best practices on WSC shared iv. Learnings are collated | Proportion of targeted stakeholders attending the workshop disaggregated by gender (29) |

| **TA indicator** | **Desired result** | **Indicator (# as it appears in the overall MEL framework)** |
| --- | --- | --- |
| **Output** | Knowledge sharing and dissemination events are conducted, and targeted stakeholders attend | Number of targeted stakeholders in TA events disaggregated by job profile, gender and area of work (47) |

It is reassuring to see that there is a qualitative measure of the inclusion of GEDSI in the planning documents for the CDPs (indicator 6), but there is no measure of whether any benefits for diverse groups of people are being realised through the implementation of these plans. It is also reassuring that as well as there being a quantitative measure of attendance of diverse groups of people in CDP activities, there is a qualitative measure of beneficiaries’ willingness and capacity to participate (indicator 13), but this is only from the perspective of facilitators, rather than beneficiaries themselves.

Hence, whilst the first point of DFAT’s Design and MEL standards for GEDSI are included in the MEL framework, the remaining three points about the quality of deliverables, changes resulting from those deliverables and barriers to inclusion from the perspective of diverse participants is missing. This gap in data collection was partially addressed in this mid-term review by conducting women-only FGDs with community WASH committee representatives in the CDPs but should be investigated further by the MEL team during up-coming fieldwork. Over the remainder of the program, GEDSI-related measures in the MEL framework should be strengthened in line with DFAT guidance cited above—in particular in relation to assessing any changes in the barriers to participation of diverse participants in community processes and governance bodies.

Whilst GEDSI is a fundamental aspect of the SAWASI program, it is not explicitly reflected in the phrasing of the program logic. Further, (as described above) the limited integration of GEDSI in the MEL arrangements further limits potential for course-correction during implementation. This means that the interpretation of how to ‘*improve access to safe water and sanitation services for disadvantaged communities in South Asian cities’* has largely been left to the CDP consortia and the TA consultants in India, Pakistan and Nepal. The ways in which this has unfolded is described below in more detail for the CDP, Learning Activities and TA in the sections below (as well as in country-specific findings in Appendices C and D). It is commendable that through each of these separate projects, some progress towards GEDSI outcomes has been achieved; however, a more systematic program-wide approach in keeping with the original intent of SAWASI would have made documenting, and learning from, this progress much clearer. There is still potential to strengthen this agenda through a GEDSI-focused learning activity during the remainder of implementation.

## EOPO 1 (CDPs)

There was extensive GEDSI expertise and experience within the consortia who led the CDPs in both India and Pakistan. The lead organisations in both consortia have their own GEDSI guidelines for community development which they used to shape their work in the CDPs.

In **India**, gender analysis had been undertaken through the Community Based Vulnerability Assessment Tool (CBVAT) and the findings from this were incorporated into the community action plans. There is also a high level GEDSI framework which guided the analysis and design. Key achievements regarding GEDSI include:

* Participation of both women and men in decision making about WASH (through the CAGs)
* Attendance of PWDs in the CAGs (the MTR team did not gauge whether the level of participation of PWDs in the CAGs went beyond attendance)
* Increased access to water (which disproportionately benefits women and girls)
* Disability accessible park

In **Pakistan**, gender analysis was undertaken through a quantitative WASH needs survey and the findings from this were also incorporated into the action plans for the CDPs. Key achievements regarding GEDSI include:

* Participation of both women and men in decision making about WASH (through the CBOs and VOs) (note that it was unclear whether PWDs attended the CBOs and VOs and if so, to what level of participation).
* Increased access to water (which disproportionately benefits women and girls)
* Prioritisation of female headed households and households with PWDs to receive rain water harvesting tanks
* Upgrade of local park to be accessible for PWDs.
* Connecting PWDs with local Disabled People’s Organisations resulting in PWDs accessing mobility aids, income and other services.

It is reassuring to see that even in the absence of explicit GEDSI-related outcomes, outputs and indicators in the overall program design and MEL framework, the consortia managing the CDPs have applied their own GEDSI sensitive approach to their analysis and action plans, with many positive results. During the MTR, the team was able to have brief FGDs with women members of the community groups in both India and Pakistan to gauge their level of participation and empowerment in WASH decision making. These consultations suggested that women’s participation is beyond mere ‘attendance’,[[94]](#footnote-95) and through the activities of the consortia, women have gained some power to influence WASH decisions in their communities.[[95]](#footnote-96) However, this ‘suggestion’ should be strengthened through more systematic data collection methods.

## EOPO 2 (Learning activities)

GEDSI-focused learning activities took place as part of the regional workshop in August 2023 (Session 8). There have also been GEDSI-specific activities undertaken with the City-Wide Partnership in Pakistan and the Delhi Water Forum. Whilst the numbers of attendees disaggregated by gender have been measured for these activities, there is less information about what participants learned and how this has translated into changes in their knowledge, attitudes and practices. Some data collected after the Regional Level Workshop suggests that participants’ confidence to progress GEDSI did not increase substantially after the Regional Workshop.

## EOPO 3 (TA)

As with the CDPs, the absence of explicit GEDSI-related outcomes, outputs and indicators in the program logic and MEL framework meant that the TA consultants defined their own agendas for progressing GEDSI. In India, Arup applied its own gender strategy at different levels (i.e. beneficiaries and change agents). They tailored their work packages to align with the GoI’s existing program for advancing gender equity in water management (AMRUT MITRA). In Pakistan, ASI and MMD ensured that the hydrological modelling included consultations with women and other marginalized groups to ascertain their specific needs with regard to drainage design suggestions (recharge systems, rain gardens etc.).

It seems from the program logic and MEL framework, that there was no original intention for GEDSI to be a significant component of the TA. In such circumstances it is admirable to see that some consideration of GEDSI given by implementing teams. The TA in Pakistan has concluded, so there is no further opportunity to strengthen GEDSI results there. In India, existing initiatives by the TA could be augmented by including TA counterparts in any GEDSI-related learning activities supported by the program.

# Appendix G: Evaluability Assessment

#### Background

* This note is an assessment of the program logic for the *South Asia Water Security Initiative* (SAWASI)—an investment by Australia’s Department of Foreign Affairs and Trade (DFAT).
* This note was prepared as part of an independent mid-term review (MTR) of SAWASI commissioned by DFAT during April – June 2024.
* A clear and conforming program logic[[96]](#footnote-97) is a requirement of DFAT design, monitoring and evaluation (M&E standards) and is necessary to articulate the basis for judging the success (i.e. desired ‘end-state’) of a development investment, and the means/mechanisms adopted to reach the end-state.
  + M&E may then be understood as a set of processes/methods to confirm that intended changes are happening, and to verify the ongoing merit of those changes.
* This assessment refers to a version of the program logic provided in a M&E Plan submitted to DFAT in January 2022 (attached at the end of this note).
* This assessment is done on a purely technical basis informed by DFAT’s M&E Standards and program theory conventions more broadly.
* The MTR team respects that SAWASI has involved a challenging history spanning a contested final evaluation of the predecessor program, a difficult design phase and a complex inception phase, which included a protracted review and multi-stakeholder redevelopment of the program logic.[[97]](#footnote-98)

#### Goal: “improved access to safe water and sanitation services for disadvantaged communities in South Asian cities”

* A goal statement defines the basis for judging the ‘relevance’[[98]](#footnote-99) of the development investment and the nature of its intended ‘impact’[[99]](#footnote-100); that is, the ‘significant and lasting change’ that the investment will contribute towards but not necessarily achieve on its own or during the lifetime of the investment. It is typically framed by the policy/development priorities of Australia and the partner country and reflects key needs of specified beneficiaries.
* The SAWASI goal appropriately sets out the intended end-state and defines the ultimate beneficiary—the class of actor among whom impact will manifest (“*disadvantaged communities”*).
* However, the goal statement may be critiqued from two standpoints:
  + **Phraseology:** the goal is a sentence fragment (i.e. not a grammatically entire sentence). An alternative phrasing could be: “*Disadvantaged communities in South Asian cities have improved access to safe water and sanitation services”.*
  + **Plausibility:** the subject of the goal (“*disadvantaged communities*”) is broad, even failing to define the target countries for SAWASI (India, Nepal, Pakistan), let alone target cities, or communities within the cities[[100]](#footnote-101). Hence, even though a goal statement ordinarily sits beyond the achievability of an end-of-program outcome (EOPO), this goal—as phrased—implies benefit for all disadvantaged communities across South Asia and hence is implausibly beyond a meaningful contribution by SAWASI.

#### EOPO 1: “By 2025, four disadvantaged communities in South Asian cities have transitioned towards WSC”

* An EOPO statement defines what can reasonably be expected by the end of investment.
  + More broadly, in program theory an ‘outcome’ is a change in performance/behaviour expected among a class of counterpart/change agent.
  + The extent to which an outcome is achieved is a measure of ‘effectiveness’[[101]](#footnote-102); and whether it is expected to endure is a measure of ‘sustainability’[[102]](#footnote-103).
* EOPO 1 appropriately sets out what might plausibly be achieved by the end of SAWASI with respect to Community Demonstration Projects (CDP). A timeframe is defined along with a broad definition of the actors among whom the change is anticipated.
* However, EOPO 1 does not conform to DFAT standards and may be critiqued from a program theory standpoint:
  + **Circular logic with the goal:** The subject of the goal (“*disadvantaged communities*”) is the same as the subject of goal in the level above. Hence the causality between EOPO 1 and the goal is tantamount to saying: ‘disadvantaged communities will have better WASH services *in order that* disadvantaged communities have better WASH services’.
  + **Undefined EOPO change agent:** In program theory convention, the subject/actor in an EOPO should be a change agent that the program will influence *in order to* impact the ultimate beneficiaries set out in the goal. EOPO 1 fails to define the change agent that SAWASI will influence (instead restating the ultimate beneficiaries).
  + **Ambiguous/undefined target:** As noted in relation to the goal (above), the targeting of EOPO 1 is implausibly broad/undefined (“*disadvantaged communities in South Asian cities*”) creating difficulties from a M&E standpoint.
  + **Ambiguous/tentative change:** The nature of the change to be realised by the end of SAWASI is ambiguous: i) the term ‘WSC’ is technical (and not globally accepted) and hence limits the value of the EOPO for communicating the intent of SAWASI to the broadest possible audience; ii) the phrase “*transitioned towards”* is also ambiguous (and tentative) from a progress measurement standpoint. Arguably, EOPO 1 could be reported as completed after the first day of implementation insofar as any steps towards WSC had been initiated.
* More broadly, the causality between EOPO 1 and the Goal raises a conceptual/technical issue.
  + The goal is concerned with improved water and sanitation services in poor communities (often referred to as water, sanitation and hygiene or ‘WASH’); whereas EOPO 1 is concerned with the WSC approach.
  + This suggests that WSC (EOPO 1) *is a means* to improving WASH sector results (Goal).
  + However, the WSC literature critiques the WASH sector for insufficiently addressing catchment-wide (or ‘city-wide’) water resources management (WRM); hence, conceptually placing WSC as a higher-order change/impact than WASH. This would seem to suggest that improved WASH services should be the focus of EOPO 1, *leading to*, changes in WSC status at goal level.
  + Put simply, the debate rests on whether WASH interventions are a *means* to achieving WSC progress, or if WSC is a *means* to achieving improved WASH. As an explicit WSC investment, the design implies the former, but the program logic sets out the latter.

#### EOPO 2: “Improved knowledge amongst workshop attendees of water sensitive cities approach”

* EOPO 2 appropriately sets out what might plausibly be achieved by the end of SAWASI. A timeframe is defined along with a broad definition of the actors among whom the change is anticipated.
* As with the goal (above), the phraseology is non-conforming as a sentence fragment with no verb (alternate phrasing could be: “*Workshop attendees demonstrate improved knowledge about the water sensitive cities approach”*).
* The value of EOPO 2 is limited in relation to communicating the intent of SAWASI to a wide/uninitiated audience because it assumes knowledge of ‘which workshop’ and knowledge of the ‘WSC approach’.
* More profoundly, EOPO 2 is problematic from a program theory standpoint since “*improved knowledge”* represents a limited/unambitious change. The causal link between improved knowledge among a select group of workshop attendees (EOPO 2) and the change framed by the goal is impossibly long. Both the ‘reach’ (i.e. number of workshop attendees relative to the number of people in disadvantaged communities) and the ‘exposure’ (the length and intensity of knowledge transfer to workshop attendees) is unlikely to have any plausible effect on the goal[[103]](#footnote-104).

#### EOPO 3: “Local, state and/or national government officials TA needs met and have a positive attitude towards partnership with Australian urban water experts”

* EOPO 3 is a non-conforming EOPO statement insofar as it is grammatically incorrect and combines different changes/end-states (e.g. It could be that government officials have their needs met but do not have a positive attitude towards TA, or *vice versa*).
* The stated change (“*a positive attitude”*) is problematic from an M&E standpoint. More discernible from a measurement perspective is a change in behavior/practice that might arise ‘downstream’ from attitudinal change.
* More succinct and measurable phrasing could be: “*Partner government officials have achieved practical changes in WASH policies or systems from technical assistance provided by Australian urban water experts”.*

#### Intermediate Outcomes

* For some designs it is appropriate/useful to introduce Intermediate Outcomes (IO) that either specify the role of a *different* class of actor between implementing team (Outputs) and change agents (EOPO); or sometimes to articulate an intermediary change in behaviour of the change agent as a precursor to the behavior specified in the EOPO.
* For SAWASI, four IOs have been defined; two for each of the CDP (EOPO 1) and TA (EOPO 3) components:

#### IO 1: “Communities obtain benefits from improved water security in line with WSC”

* This IO substantively restates both EOPO 1 and the goal, creating further circularity/redundancy in the logic; essentially:
  + ‘Communities will benefit from improved water security (IO 1)’ [*in order that*] ‘communities will benefit from transitioning to better water security’ (EOPO 1)’ [*in order that*] communities will benefit from improved WASH services*’* (goal).
* If anything, IO 1 is ‘higher’ in the logic hierarchy than the current goal insofar as “*obtaining benefits*” is a more advanced change than “*accessing services”* (i.e. there is causality between these statements).
* Further, the phrase “*in line with WSC”* is ambiguous. More precise language would be more measurable (e.g. “*communities have transitioned one or more stages of WSC…”.*

#### IO 2: “Key agencies and informed communities have adopted collaborative water governance arrangements”

* IO 2 appropriately defines a class of change agent to be influenced by the program in order to realise the goal. In this regard, IO 2 could be more appropriate as EOPO 1.

#### IO 3: “Local, state and/or national officials have improved capacities on urban water resource management”

* IO 3 appropriately defines a class of change agent to be influenced by the program in order to realise the goal. In this regard, IO 3 could be more appropriate as EOPO 3.
* The main critique of IO 3 is its broad focus (i.e. lack of definition) in relation to who the change agents are (i.e. “*Local, state and/or national officials”*) and the nature of the desired change (i.e. “*improved capacities”*).

#### IO 4: “Attendees have improved awareness on urban water resource management”

* IO 4 is aligned under EOPO 3, but appears to be substantively aligned under EOPO 2 since it implies attendees of the regional workshop (unless there is investment in counterpart capacity through the TA).
* There is circularity in the logic between IO 4 and EOPO 2; essentially:
  + ‘*Attendees will have improved awareness of water resource management’* (IO4) [in order that] ‘*attendees will have improved knowledge of water resource management’* (EOPO 2).

#### Outputs

* Seven broad outputs are appropriately defined to influence the above outcomes.
* Outputs 1 - 3 are appropriately aligned under EOPO 1 (CDPs).
  + The only critique is that Output 1 lacks a verb (e.g. “*drafted”*).
* Outputs 4 and 5 are appropriately aligned under EOPO 2 (learning events).
  + The only critique concerns the subtle wording/emphasis on workshop attendees (i.e. “*targeted stakeholders attend”*) rather than the emphasis being on implementing team delivery (e.g. “*targeted stakeholders convened*) which is the convention with defining outputs.
* Outputs 6 and 7 are aligned under EOPO 3 (TA).
  + Output 6 (*“Local, state and/or national governments receive timely, high quality technical support”*) essentially restates IO 3 and EOPO 3; again setting in place circular logic. The emphasis of Output 6 is on change agent behaviour rather than implementing team delivery (e.g. “*Technical advisers deliver timely, high quality technical support”*).
  + Output 7 is appropriately aligned under EOPO 3.

#### Alternative program logic

* Arguably, a simpler more succinct program logic supports easier communication of program intent to a broad audience, and hence is better for mobilizing support. It is also easier from a M&E standpoint.
* Drawing from the above critique, a simpler and more conforming program logic for SAWASI could be as set out below:

GOAL: Disadvantaged communities in India (Delhi), Pakistan (Islamabad, Rawalpindi, Lahore) and Nepal (Pokhara, Tulsipar) have benefited from climate resilient water and sanitation services.

EOPO 1: Partner government agencies and informed community groups are collaboratively governing improved water and sanitation services in four target communities.

EOPO 2: Partner government officials and Australian urban water experts have established mechanisms to collaborate and exchange lessons and knowledge about climate resilient cities.

EOPO 3: Partner government officials have implemented improved policies or systems for urban water resource management.

EOPO1 OUTPUTS

* Water security planning and implementation arrangements documented between informed communities, government agencies and other relevant stakeholders.
* Community level water security structures established.

EOPO2 OUTPUTS

* Targeted stakeholders convened for regional and city level learning fora about the water sensitive cities approach.
* Mechanisms to enable ongoing collaboration and knowledge exchange agreed between.

EOPO3 OUTPUTS

* Technical advisers deliver timely, high quality technical support for improved urban water and sanitation services.

The diagram below shows an overview of the SAWASI program logic.

A diagram containing SAWASI goal, objectives, EOPOs, investment outcomes, outputs and activities. 



1. The MTR appreciated support from (in India) Emily Megow, Belinda Costin, Nagasreenivas Kanchi, Anand Singh; and (in Pakistan) Stephanie Werner, Abu Rehan, Sanam Khan. [↑](#footnote-ref-2)
2. In India, SAWASI is known as AIWASI (Australia-India Water Security Initiative); in Pakistan as APWASI (Australia-Pakistan Water Security Initiative); and in Nepal as ANWASI (Australia-Nepal Water Security Initiative). [↑](#footnote-ref-3)
3. The independent review team comprised two Australia-based evaluators and two locally engaged evaluators in each of India and Pakistan. In addition, the MTR team was supported by a Canberra-based DFAT officer during fieldwork. [↑](#footnote-ref-4)
4. [DFAT Design and Monitoring, Evaluation and Learning Standards (Australian Government Department of Foreign Affairs and Trade](https://www.dfat.gov.au/sites/default/files/dfat-design-monitoring-evaluation-learning-standards.pdf)) [↑](#footnote-ref-5)
5. [Ethical Research and Evaluation Guidance Note (Australian Government Department of Foreign Affairs and Trade)](https://www.dfat.gov.au/sites/default/files/ethical-research-evaluation-guidance-note.pdf) [↑](#footnote-ref-6)
6. In India, SAWASI is known as AIWASI (Australia-India Water Security Initiative); in Pakistan as APWASI (Australia-Pakistan Water Security Initiative); and in Nepal as ANWASI (Australia-Nepal Water Security Initiative). [↑](#footnote-ref-7)
7. See Figure 1 and <https://watersensitivecities.org.au/> [↑](#footnote-ref-8)
8. <https://watersensitivecities.org.au/about-the-crcwsc/> [↑](#footnote-ref-9)
9. <https://watersensitivecities.org.au/wp-content/uploads/2018/10/WASH-paper-ThinkTank-180925-WEB-007.pdf> [↑](#footnote-ref-10)
10. <https://watersensitivecities.org.au/what-is-a-water-sensitive-city/> [↑](#footnote-ref-11)
11. <https://watersensitivecities.org.au/wp-content/uploads/2019/06/190611_V3_Need-help-transitioning-Module-3-s.pdf> [↑](#footnote-ref-12)
12. <https://watersensitivecities.org.au/wp-content/uploads/2016/05/TMR_A4-1_MovingTowardWSC.pdf> [↑](#footnote-ref-13)
13. Dolan, F., Lamontagne, J., Link, R. *et al.* Evaluating the economic impact of water scarcity in a changing world. *Nat Commun* **12**, 1915 (2021). https://doi.org/10.1038/s41467-021-22194-0 [↑](#footnote-ref-14)
14. World Resources Institute, 2019: https://www.wri.org/blog/2019/08/17-countries-home-one-quarter-world-population-face-extremely-high-water-stress [↑](#footnote-ref-15)
15. NASA, 2015, https://www.jpl.nasa.gov/news/study-third-of-big-groundwater-basins-in-distress [↑](#footnote-ref-16)
16. World Resources Institute, 2023, https://www.wri.org/insights/highest-water-stressed-countries [↑](#footnote-ref-17)
17. N.B A AUD1.8 million water project in Afghanistan was also funded under SAWASI. [↑](#footnote-ref-18)
18. New Delhi; and Islamabad, Rawalpindi and Lahore. [↑](#footnote-ref-19)
19. The MTR team used a bespoke qualitative analysis application. [↑](#footnote-ref-20)
20. WWF, WRI, Arup, ASI, Alluvium and OPM. [↑](#footnote-ref-21)
21. AIWASI CDP, AIWASI TA, APWASI CDP, APWASI TA, ANWASI TA and SAWASI. [↑](#footnote-ref-22)
22. The MTR team was not resourced to undertake fieldwork in Nepal, hence no in-depth analysis is provided of ANWASI. [↑](#footnote-ref-23)
23. In the three partner countries, the discrete TA projects were nominated by government counterparts and hence are aligned with local priorities. This is consistent with sustainable development principles and DFAT’s current locally-led development policy, but is different from the intent of the SAWASI design. [↑](#footnote-ref-24)
24. None of the agreements included performance-based payments, leaving it difficult for DFAT to manage and enforce performance, especially in relation to TA which were governed by a Deed of Standing Offer that primarily provided for inputs-based invoicing. Arguably, this is irregular for such work within DFAT and not appropriate for a program of the scope and scale of SAWASI. [↑](#footnote-ref-25)
25. Arguably a consequence of there being no central coordinating body to drive regional coherence (see Section 3.4) [↑](#footnote-ref-26)
26. The revised program logic positions the WSC approach (as per the EOPOs) as the *means to* improved access to water and sanitation services (as per the goal). While attempts have been made to track progress towards WSC, there has been no measurement of progress towards safer water and sanitation. Further, while the six-monthly reports present information about WSC across the program, there are inconsistencies in the methods and data used between each country. Furthermore, target communities are not even at stage 1 of the WSC process, hence discerning progress towards city-wide WSC status as framed in the program logic seems unattainable. [↑](#footnote-ref-27)
27. Both projects undertook systematic participatory processes to identify target communities for the CDPs. [↑](#footnote-ref-28)
28. For example, extending or providing potable water to unserved households, extending sewer networks, introducing small scale waste water treatment solutions, creating public green places, providing groundwater recharge. [↑](#footnote-ref-29)
29. The documentation of CDP ‘knowledge products’ should be undertaken by development communication specialists. Such skills may be sourced within the implementing consortia, or OPM or otherwise from the market. [↑](#footnote-ref-30)
30. The final point—advocate—presents an opportunity moving forward for DFAT to both contribute to project impact, and to use the project innovations as a platform for access and influence among counterparts. [↑](#footnote-ref-31)
31. For example, In India there are opportunities with the TA in AMRUT 2.0 to replicate interventions in Delhi and Haryana through coordination led by the DWF. [↑](#footnote-ref-32)
32. It is unusual for a DFAT design to explicitly align with a particular technical approach. [↑](#footnote-ref-33)
33. <https://watersensitivecities.org.au/> [↑](#footnote-ref-34)
34. <https://wscaustralia.org.au/about/#who-we-are> [↑](#footnote-ref-35)
35. Further strengthened in the new International Development Policy (2023) for new investments. [↑](#footnote-ref-36)
36. (Original Outcome 2) “*By 2025, improved governance of urban water systems in two South Asian cities enhances community resilience to climate change and other water-related shocks”.* The MTR team was unable to ascertain the reason why this outcome statement was amended following peer review. [↑](#footnote-ref-37)
37. <https://www.dfat.gov.au/publications/development/dfat-guidance-note-locally-led-development> [↑](#footnote-ref-38)
38. The AHC in Pakistan invited expressions of interest for TA from all provincial governments. The AHC in Nepal proactively canvassed TA needs with government counterparts. [↑](#footnote-ref-39)
39. Flood modelling in two cities in Nepal; urban flood prevention and management feasibility study in Lahore. [↑](#footnote-ref-40)
40. The *Atal Mission for Rejuvenation and Urban Transformation* 2.0 (AMRUT 2.0) scheme was launched on 1 October 2021 for 5 years to provide universal household water supply in the country and sewerage coverage in 500 cities. Budget allocation is approximately AUD54 billion. [↑](#footnote-ref-41)
41. <https://www.smh.com.au/world/asia/desperate-for-water-some-delhi-residents-are-prepared-to-kill-20240604-p5jj29.html> [↑](#footnote-ref-42)
42. Australia and other donor funded TA act as a pool of technical experts for AMRUT 2.0 and contribute to the effective spending of $12 billion. The SAWASI TA leads the technical assistance for rejuvenation of 3400 urban water bodies with a GoI investment of $ 1 billion and supported two States of Delhi and Haryana to unlock $759 million. [↑](#footnote-ref-43)
43. Delhi and Haryana, and 93 associated cities. [↑](#footnote-ref-44)
44. See Appendix C (AIWASI) for an elaboration of the leverage enabled by DFAT-funded TA. [↑](#footnote-ref-45)
45. There is no CDP implemented in Nepal. [↑](#footnote-ref-46)
46. Two directors of AMRUT 2.0 in Delhi; WASA officials and Urban Unit executive in Lahore. [↑](#footnote-ref-47)
47. Formerly a division of Mott MacDonald UK; <https://mmpakistan.com/> [↑](#footnote-ref-48)
48. SAWASI also drew on other funding (e.g. short course scholarships) to facilitate learning aligned with program priorities. [↑](#footnote-ref-49)
49. A regional workshop was set out in the SAWASI design, but no support/implementation arrangements or contract scope were defined, by default placing additional responsibilities on SDV staff. [↑](#footnote-ref-50)
50. Tony Wong was previously the CEO of the WSC CRC discussed above with reference to EOPO 1 and is considered an architect and driver of WSC thinking. <https://www.monash.edu/msdi/about/people/research/professor-tony-wong> [↑](#footnote-ref-51)
51. In addition to these six contracts, SDV also administered the MTR contract, hence a total of eight contracts. [↑](#footnote-ref-52)
52. (from Whitley, R. 2000), reflecting a low degree of interdependence between management units, and high autonomy of action, though with an expectation of overall structure or common purpose. [↑](#footnote-ref-53)
53. The MTR team was advised that this arrangement has previously been discussed, but not actioned. On the basis of this MTR, it is a reasonable structural change to improve efficiency, even if locally-engaged staff at AHCs require additional training/support through a transition arrangement. [↑](#footnote-ref-54)
54. Beyond the ambition of the regional program design, one of the main practical benefits of SAWASI to DFAT is that it has enabled development investments within non-ODA partner countries, managed by AHCs. [↑](#footnote-ref-55)
55. Arguably, this issue relates to the earlier observation (reported with reference to EOPO 2) that there is no regional counterpart for SAWASI that would be the interlocutor with SDV. [↑](#footnote-ref-56)
56. In retrospect, OPM should have raised with DFAT the implications of the resource/scope shortcomings and advocated earlier for an amendment in order to meet expectations. [↑](#footnote-ref-57)
57. South and Central Asia Section (SDV). [↑](#footnote-ref-58)
58. ‘Water Sensitive Cities is an approach developed by the Cooperative Research Centre for Water Sensitive Cities Ltd based at Monash University, Australia. More information can be found here: <https://watersensitivecities.org.au/what-is-a-water-sensitive-city/> [↑](#footnote-ref-59)
59. These study tours were funded under the Australia Awards in South Asia and Mongolia Program, not under AIWASI [↑](#footnote-ref-60)
60. Some of these interviews took place online before the visit to India. [↑](#footnote-ref-61)
61. The implementation of nature-based solution for wastewater treatment is yet to be implemented. [↑](#footnote-ref-62)
62. Geotech surveys, drone surveys, accessibility audits, gender analysis, baseline survey. [↑](#footnote-ref-63)
63. Ultimately, two communities were selected from 1054 possible communities by applying selection criteria and engaging with authorities. [↑](#footnote-ref-64)
64. DWF is conceived as performing five core functions: i) strategic think tank; ii) influencer; iii) matchmaker; iv) knowledge repository; v) catalyst. [↑](#footnote-ref-65)
65. The *Atal Mission for Rejuvenation and Urban Transformation* 2.0 (AMRUT 2.0) scheme was launched on 1 October 2021 for 5 years to provide universal household water supply in the country and sewerage coverage in 500 cities. Budget allocation is approximately AUD54 billion. [↑](#footnote-ref-66)
66. AMRUT 2.0 is the successor of AMRUT 1.0 to continue the reform at scale. More information can be found at <https://mohua.gov.in/cms/amrut.php>. [↑](#footnote-ref-67)
67. The GoI is committed to achieving the SDGs, with Cabinet responsible for international reporting. SDG 6 (safe water and sanitation) is considered critical as it is also known to underpin achievement of other SDGs (1, 2, 3, 5, 11, 14 & 15). [↑](#footnote-ref-68)
68. E.g. Australia could provide a key role in supporting the rejuvenation of city lakes and water bodies across cities contributing to WSC goals and building climate resilience. [↑](#footnote-ref-69)
69. These study tours were funded under the Australia Awards in South Asia and Mongolia Program, not under AIWASI [↑](#footnote-ref-70)
70. The evaluation team interacted with two state/city teams who acknowledged the benefit of the study tour. It has triggered impromptu knowledge exchange between participating stages after the visit. [↑](#footnote-ref-71)
71. MHT has formed CAGs in each block in Bakkarawala (7) and each in three colonies in Mubarikpur Dabas (3). [↑](#footnote-ref-72)
72. The Municipal Corporation of Delhi is conducting a tree census in 250 wards of Delhi, collecting information such as the number of trees in a colony, and the age, health and condition of the trees with the aim of protecting the trees, e.g. monitoring illegal cutting of trees. [↑](#footnote-ref-73)
73. Amrut Sarovar scheme under AMRUT 2.0. [↑](#footnote-ref-74)
74. The term used by AMRUT 2.0 officials to describe a range of mentoring and facilitation services to enable city/state officials to comply with AMRUT 2.0 processes/requirements. [↑](#footnote-ref-75)
75. In this regard, the individuals engaged by Arup within the Ministry represent a significant ‘key person risk’ to DFAT. [↑](#footnote-ref-76)
76. Although comprehensive context analysis is good practice in community development, the MTR team questioned if the full breadth/depth of analysis undertaken was necessary in circumstances where consortium partners had a history of engaging in target communities and had insights into fundamental issues. Further, there may have been scope to improve the sequencing and project management of these activities and to utilised proven rapid assessment approaches. [↑](#footnote-ref-77)
77. The consortium signed an MoU with DJB but operates with half a dozen different Government actors. Within the consortium, WRI is the lead, but has adopted a collective management and leadership style rather than a classical PMU structure. [↑](#footnote-ref-78)
78. Important deliverables have included a baseline, a range of knowledge products, compendium of good practices. [↑](#footnote-ref-79)
79. To manage risks associated with each, including compounding implementation delays; and also, the pragmatic reality that the CDP and the TA within AMRUT 2.0 operating at vastly different scales of intervention. [↑](#footnote-ref-80)
80. E.g. requesting a water tanker delivery. [↑](#footnote-ref-81)
81. This is something that has been done in the Pakistan CDP. [↑](#footnote-ref-82)
82. South and Central Asia Section (SDV). [↑](#footnote-ref-83)
83. ‘Water Sensitive Cities is an approach developed by the Cooperative Research Centre for Water Sensitive Cities Ltd based at Monash University, Australia. More information can be found here: <https://watersensitivecities.org.au/what-is-a-water-sensitive-city/> [↑](#footnote-ref-84)
84. https://jeas.agropublishers.com/2020/09/changes-in-climatic-parameters-in-lahore-pakistan/ [↑](#footnote-ref-85)
85. MMP is a wholly owned Pakistan consultancy, divested by Mott McDonald UK. [↑](#footnote-ref-86)
86. It was expected that each household pay a tariff for the filtrated water; however poor households that were unable to pay were not excluded from receiving water. [↑](#footnote-ref-87)
87. Evidently, a Technical Advisory Group (TAG) panel was established and DFAT was obliged to select implementers from this panel. [↑](#footnote-ref-88)
88. Urban Unit, Water and Sanitation Authority (WASA) Lahore, Punjab Housing Urban Development & Public Health Engineering Department (HUD&PHED). [↑](#footnote-ref-89)
89. Rogers, E. (1962) *Diffusion of Innovations*, Free Press, New York [↑](#footnote-ref-90)
90. https://lda.gop.pk/website/index.php [↑](#footnote-ref-91)
91. The fourth 6-monthly report refers to a consultation made by DFAT’s gender advisor: Alexandra Bayfield. It is unclear when this took place, but presumably between July and November 2023. [↑](#footnote-ref-92)
92. <https://www.dfat.gov.au/about-us/publications/dfat-design-monitoring-evaluation-learning-standards>, page 42. [↑](#footnote-ref-93)
93. By ‘diverse groups’, it is meant people of different genders, abilities, class, religion or other identities which may lead to marginalisation. [↑](#footnote-ref-94)
94. For example, women from CAGs in India have taken the role of identifying service-related problems and engaging with the local authorities directly using channels such as writing applications, using the MCD complaints management app-MCD 311, approaching the local political representatives. [↑](#footnote-ref-95)
95. The MTR did not collect qualitative data from women, PWD or other marginalised group residents about their perceived benefits from the program due to limited time and because, arguably, it is too soon to gauge these benefits in the India CDP. [↑](#footnote-ref-96)
96. A ‘theory of change’ is a form of program logic that sets out the roles of different classes of actor who will influence the intended social changes. [↑](#footnote-ref-97)
97. The goal of SAWASI has not changed since the original design document. The objective (“*To strengthen South Asian city-level water governance and undertake investments that provide urban water services support to disadvantaged communities (particularly women and girls) to access reliable, safe water and sanitation services*”) is also the same. However, logic revision during the first 6 months resulted in a second objective (“*to make partner governments, other donors and water professionals aware of Australian expertise in the area of Urban Water Management*”) and the EOPOs were updated. That is, whereas the original EOPOs seemed to align directly with the program goal and original objective (to improve access to water and sanitation), the newly defined EOPOs were more about the second objective and the method chosen to achieve the goal (i.e. WSC to showcase Australian expertise in the area of Urban Water Management). [↑](#footnote-ref-98)
98. https://www.oecd-ilibrary.org/sites/543e84ed-en/1/3/4/index.html?itemId=/content/publication/543e84ed-en&\_csp\_=535d2f2a848b7727d35502d7f36e4885&itemIGO=oecd&itemContentType=book#section-d1e2474 [↑](#footnote-ref-99)
99. https://www.oecd-ilibrary.org/sites/543e84ed-en/1/3/4/index.html?itemId=/content/publication/543e84ed-en&\_csp\_=535d2f2a848b7727d35502d7f36e4885&itemIGO=oecd&itemContentType=book#section-d1e4269 [↑](#footnote-ref-100)
100. Delhi alone is estimated to have a population of more than 33,000,000 people. [↑](#footnote-ref-101)
101. https://www.oecd-ilibrary.org/sites/543e84ed-en/1/3/4/index.html?itemId=/content/publication/543e84ed-en&\_csp\_=535d2f2a848b7727d35502d7f36e4885&itemIGO=oecd&itemContentType=book#section-d1e3395 [↑](#footnote-ref-102)
102. https://www.oecd-ilibrary.org/sites/543e84ed-en/1/3/4/index.html?itemId=/content/publication/543e84ed-en&\_csp\_=535d2f2a848b7727d35502d7f36e4885&itemIGO=oecd&itemContentType=book#section-d1e4964 [↑](#footnote-ref-103)
103. The program theory concepts of ‘reach’ and ‘exposure’ are key ideas referenced in DFAT’s M&E standards and are fundamental to designing plausible theories of social change. [↑](#footnote-ref-104)