POLICY NOTE
Assessment of Outcomes from the Community Physical Infrastructure (CPI) Component
(July 2022)

This policy note is based on the Study On "Assessment Of Outcomes From The Community Physical Infrastructure (CPI) Component Of BRACE Programme" (https://brace.org.pk/). This note summarizes the highlights of the assessment and the policy actions recommended to RSPN for consideration by the Government of Balochistan and the European Union. The key objectives of this Study were to (a) assess the relevance of the CPI to the needs of local communities, especially to women, (b) identify the immediate impact (economic and social outcomes) of CPI schemes implemented under the BRACE Programme on improving rural livelihoods and empowering communities, especially women, (c) quantify the intervention outcomes as direct and indirect benefits delivered, by type of CPI scheme provided, and (d) report the communities’ and the concerned government departments’ perception of the outcomes of CPIs.

This note was distilled from the main study report, which was prepared after conducting detailed fieldwork, survey, analysis, and discussions. The Study to measure the immediate impact of outcomes associated with Community Physical Infrastructure schemes implemented under the BRACE Programme, and was completed in mid-June 2022.

Four hundred beneficiary households (HH), including 50 percent of women beneficiaries, were interviewed by the survey team in door-to-door HH surveys—in addition to the data collection and discussions with the Implementing Partners (IPs) surveys and follow-up experts’ field Focus Group Discussions and Key Informant Interviews. These surveys were based on a sample of forty CPI interventions, including four Drinking Water Supply Schemes (DWSS), Drainage and Sanitation Schemes (DSS), Flood Protection Walls (FPW), and Rehabilitation of Government Schools (RGS) of the six categories of CPIs in three out of the nine targeted districts—based on a significant sample and in agreement with RSPN. Based on the sample of forty CPI schemes across the three selected districts, the Study assessed twelve schemes in Kech, sixteen in Khuzdar, and twelve in Pishin, respectively.

The assessment showed that DWSS and DSS schemes were the most relevant among needs identified during women’s Community Institutions (CIs) meetings under the BRACE Program. The DWSS, DSS, FPW, and RGS schemes were also relevant to the community’s needs. Some issues around the adequacy and involvement of communities in identifying the DSS and RGS schemes. For example, households opined that more relevant RGS could have been undertaken in the BRACE Programme. However, the HH expressed satisfaction with improved education facilities under the RGS. Likewise, despite a lack of satisfaction, the HH agreed that the DSS was indeed needed.

These results show that in the case of the RGS, the interventions being more remote and communal, in addition to serving the mobilized women CIs’ perceived need—educating girls—may have resulted in these contradictory perceptions. The IPs and the Government should therefore build better understanding within the HH during the needs identification stage. They should also explain what BRACE can do in terms of the available resources. So that HHs does not perceive that a ‘staple’/standard menu is being offered to all communities/HHs—as the HHs base their responses upon the menu of needs identified in their respective Village Development Programmes (VDPs) and Union Council Development Programmes (UCDPs).
In the case of the DSS, it was simply a shortage of funding for providing 'enough'/required and appropriate DSS, which led to the HHs expressing that their needs were inadequately met. Here again, through the IPs, the BRACE Program should either increase allocation or assist the communities in accessing additional funds from Government’s Annual Development Plan budget. In this matching grants approach, Government funds match BRACE funds. The IPs also need to address the drainage outfall issues to reduce potentially negative environmental impacts—ensuring this does not end up polluting streams and groundwater, nor does it only move the effluent further from the communities.

DWSS has improved communities' external networks, enhanced communication skills to negotiate with actors outside the community, and increased the communities' social cohesion and self-dependency through their involvement in the project implementation process, thereby empowering the beneficiary HH after the BRACE Programme. In addition, the Social Impact on women's empowerment after the implementation of DWSS under the BRACE Programme was prominent, with women being fifty percent of the beneficiaries.

The overall potential impact of DWSS, based on reduction in health expenditures alone, is 1.1 bilPKR/yr for the 300,000 targets HHs. Putting this in perspective, this is akin to making 1.1bilPakistani Rupees (PKR) available each year for other HH investments—social and economic. Reduced workload for women and children resulting from DWSS implementation under the BRACE Programme has potentially increased women's incomes, with the Programme interventions contributing 4.8bilPKR/yr to the economy of the nine districts 16,000PKR/yr/HH.

This is the same as the impact of the ESHAS HH cash transfers and is additionally self-sustaining. An economic analysis for the BRACE Programme DWSS shows robust benefit-cost ratios, positive Net Present Value (NPV), and positive Internal Rates of Return (IRR). The NPV estimated for all thirty-two DWSS was 100milPKR for an investment of 45milPKR. This NPV accounts for electricity savings as these are part of the benefit stream. If the average NPV calculated is applicable across the 147 DWSS CPI already implemented, this investment (~205milPKR) has generated an NPV of 500milPKR. While DWSS implementation under the BRACE Programme has encouraged tree plantation and sustenance agriculture, it also results in the unregulated extraction of groundwater and drying up vegetation due to water passage through pipes instead of water channels.

The DSS has also had a direct impact on the social uplift of the beneficiary HH through cleaner environments. Open Defecation Free and total sanitation Communities (ODFC)1, improved hygiene, the appearance of localities, intra-community mobility, and a heightened sense of self-worth. The DSS implemented under BRACE Programme has lessened HH health expenditures by 50 percent on an average and added 0.86milPKR/yr towards HH savings. A detailed cumulative CPI impact can be carried out later as part of the final post-completion assessment of the BRACE Programme. However, for now, it suffices to understand that, potentially, if BRACE Programme manages even a 1 percent coverage under the current investment, there would be a total saving/additional income of 19.5milPKR/yr. In the nine districts—available for other social and economic activities by the HHs.

The direct economic impact of the FPW under the BRACE Programme was realised in an increased value of land, a lessened risk to investments in housing, and an increase in sustenance agriculture. In addition, HH reported enhanced social cohesion and a sense of security against disasters hitherto perpetuated after the floods, post implementation of the FPW under the BRACE Programme. An increase in plantation and sustainable sustenance agriculture are the main environmental impacts of FPW CPI. FPW and related flood protection CPIs have increased land values of beneficiary HHs (0.19 percent coverage) by 5.7milPKR, which implies that even a 1 percent total coverage of such schemes can potentially contribute to an increase in 300milPKR in terms of HH land value.

1. This URL provides some further background. (https://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/ODF_Guidelines_Nigeria.pdf)
Despite the HH perceiving lower relevance of RGS interventions, they have contributed to increased enrolment in girls’ schools and improved health and hygiene due to the construction of toilets as part of the RGS. In addition, a potential increase in women’s participation in the workforce and reduced health expenditures are also immediate economic impacts. Based on the data available to the assessment team, the Implementing Partners (IPs) have faltered in not promoting a massive tree plantation in the context of RGS interventions which could have had multiple environmental and educational benefits.

A majority of beneficiary HH participate in CPI implementation and then during the operation and maintenance. HH in nearly all the UCs contributed to the project’s capital cost, including upstream contributions by HH towards future operation and maintenance costs.

According to government officials, cost-effectiveness and timely completion of CPIs make them impactful and different from the Government’s infrastructure projects. The Government looked upon the CIs seeded and developed under the BRACE Programme as the nursery for local government political structures once they came about. The IPs should continue and improve mechanisms to nourish this beyond this BRACE Programme—such as the Joint District Development Committees (JDDCs).

Effective coordination is emerging between the government institutions and the CIs. For example, after VDPs and UCDPs, which the IPs train communities to develop, a District Development Plan (DDP) has also been prepared in Kech by the Local Support Organization (LSO) network, and the Government funded forty agriculture projects from this DDP. These projects were funded through the SDG fund of the Balochistan government, and a total of 30milPKR was allocated.

Policy Recommendations
In addition to the recommendations, some overarching recommendations for consideration by the IPs and the Governments are as follows.

Encourage distributed and localized energy resources by linking Solar Installations for DWSS to wider HH use through localized grids. Dedicated solarised DWSS funded by BRACE Programme has helped the community to lift groundwater for drinking and other domestic purposes. However, despite having these solar systems, most beneficiary villages do not have electricity access—as this solar generation is only dedicated to pumping and not connected to HH uses. With small investments, ideally, by HHS using VO saving as a loan or linking VOs with microfinance banks, they could establish a mini-grid, achieving SDG 7 “access to reliable electricity.”

Solar technology is comparatively new for beneficiary villages, and proper operation and maintenance training is required, as, during the FGDs and site visits, no trained operators were present. The solar unit inverters were also not adequately placed inside a casing and were put above a stone under the solar panels. The boreholes were also not properly protected.

IPs should agree with CIs on standardised CPI designs providing options for adaptation to a particular environment and topography. For example, in most of the DWSS in Kech and Khuzdar, the project design included a common water collection point. Still, the community on its own has extended pipelines from this point resulting in multiple communal water taps in villages, which, in the long term, will affect the sustainability due to over-extraction of water.

The sustainability of non-solar electricity-based DWSS is also debatable due to Balochistan’s poor electricity situation. Operation of DWSS on electricity is not feasible in such situations. During the FDGs, beneficiaries of these electrified schemes also complained about the electricity/power shortage. They asked for financial and technical support to install solar units as part of the BRACE intervention.

A proper operation and maintenance mechanism and its financing are required to sustain implemented CPIs, especially in the case of rehabilitated government schemes. There are sustainability issues where the RGS has been rehabilitated, as the Government does not allocate recurring funds for operations and maintenance, nor
has the community developed a model of collecting fees linked to continuing the operations and maintenance.

Flood protection structures have provided mitigation measures to protect village settlements, including houses, land, and public and private physical assets. However, communities reported a strong need for technical and financial support from IPs and Government to improve the flood mitigation structures in settlements and around villages.

The CPI component of the BRACE Programme needs to focus more on the sustainability of the schemes, particularly for operations and maintenance, capacity building and training of the local community, and the use of viable technology for implementing schemes. There is also a need for proper implementation of post-delivery mechanisms, for example introducing an across-the-board annual maintenance fee to ensure enhanced efficiency and sustainability of the schemes.

IPs and CIs need to be weaned off a perpetual grant-seeking model. There are two parts to this, one for IPs and CIs to develop sustainable models of collaboration that allow for post Programme operations. The second part focuses on deeper post Programme Social Mobilisation to establish the social contract around the commercial operation of assets like DWSS and other energy-related schemes. It was seen that in areas where water user fees had been institutionalised, the CIs were often challenged in collecting the fees from even a quarter of the households. A creative and sustainable social mobilisation discourse amongst the CI activists and the IPs can go a long way in deepening the realisation amongst beneficiary HH to pay the fees. A model for the sustainability of the discourse needs to be developed before the end of the BRACE Programme.

In the future, programmes such as BRACE should consider the pros and cons of emphasising geographical spread when resources are limited or otherwise enhance resources available to such programmes. A very thin spread of interventions lessens the impact as, despite high relevance, the needs are not addressed adequately.

Complimentary CPI interventions are closely linked to the BRACE Program interventions’ relevance, impact, and sustainability. Increasing resources is the answer. Otherwise, this is a case of poor fiscal or simply allocational efficiency—this inevitably threatens sustainability. As mentioned earlier, there is a need to enhance the BRACE Programme in size and possibly encourage the Government to start a ‘matching grants’ programme to enhance and sustain the present outcomes.

IPs’ capacity for engineering and environmental safeguards assessment needs improvement. Innovation will be key in developing this. The current multi-sector ‘specialisation’ model and provision by a single IP is not workable—it is neither efficient nor effective. It is simply not possible that the current model followed by IPs (not just the BRACE Programme) can net effective and efficient engineering and safeguards and other important technical designs and implementation. A better model is for the Programme to build a central capacity, possibly at the RSPN level, as a first step. This central capacity at RSPN can later be spun off as a for-profit entity to provide specific technical assistance on community infrastructure.