

India's Concessional Financing of Solar Projects Overseas: Breakdown and Analysis

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Introduction

In 2018, the Indian government announced its intention to provide concessional finance for more solar projects overseas through the long-running [Indian Development and Economic Assistance Scheme](#) (IDEAS). Coinciding with the founding conference of the Indian and French led International Solar Alliance (ISA), India's Ministry of External Affairs (MEA) announced agreements for India's EXIM Bank to extend 27 concessional 'Lines of Credit' (LOCs) to 15 countries, worth US \$1.4 billion, for various solar projects (MEA 2018). The government further announced a new Project Preparation Facility, intended to help ISA member states to conceive and prepare projects to be financed by Indian LOCs (MEA 2018). Of the LOCs announced, close to US \$1 billion were for projects in Africa. Moreover, the government announced that of the US \$10 billion offered to African states at the 2015 India-Africa Forum Summit, it wanted US \$2 billion to be used for solar projects (Mishra 2018).

Despite high-level political commitment, India's concessional funding of solar projects overseas is little researched or analysed. This paper accordingly examines India's concessional LOCs for solar projects to date. Based on available EXIM Bank and MEA data, the paper outlines three aspects of India's financing of solar:

1. An orientation towards West Africa and South Asia, in the number and value of LOCs.
2. A continuing focus on off-grid and small-scale solar, which India's track record of financing transmission and electrification projects make it well placed to deliver; but also, a recent reorientation to financing large-scale solar parks, which will be more challenging to realise.
3. Although the Modi government clearly wants to utilise IDEAS to support its agenda for the ISA, to date there has been limited alignment.

Dissecting the available data is revealing, even though a lack of detailed reporting means that India's financing and the status of projects has many opaque aspects. This paper explores the data limitations that do not allow for substantive assessment of the various ways that Indian LOCs to finance solar may (or may not) be considered 'successful'. These include:

- a. The signing-off of EXIM Bank loans that are well-constructed and viable, and the timely implementation of projects.
- b. Projects that deliver sustainable and inclusive energy for partners, invest in technology and knowledge transfer, and contribute to just energy transformations.

Headline statistics on India's concessional lending for solar

According to India's EXIM Bank's data¹, India has given or agreed to give US \$1021.96 billion in concessional LOCs for solar projects. Including additional LOCs announced by India's MEA at the founding conference of the ISA in 2018, which are not yet reported in EXIM Bank's data, gives a higher figure of US \$1.677.96 (see Chart 1)². See Appendix A for a list of all LOCs.

India's concessional lending for solar projects pre-dates its recent agenda to build international cooperation on solar development through the ISA. Between 2004 and 2017, India has extended LOCs to nine countries, adding up to US \$187 million, for projects which are now completed or are currently being implemented³ (see Chart 2). These LOCs were for the delivery of off-grid solar technologies, solar-based mini-grid systems, and one solar module assembly plant.

The vast majority of Indian LOCs are recent: 28 of 38 since 2017/18. Most are agreed politically (at a ministry level between India and the relevant borrowing party), and are now at the stage where either the associated projects need to undergo technical and financial appraisal, or appraisals have been conducted, and project are ready to proceed.

¹ India's EXIM Bank publishes two data sets on concessional LOCs. First, a list of operational LOCs, which have gone through technical and financial appraisal, and are complete, under implementation, or at the stage where bidding is open to select companies to complete the work. Information is provided on the country, region, amount of credit, projects covered, project value, and whether LOCs are available for procurement (open for companies to bid for projects). Second, a list of pipeline LOCs, that are politically agreed and are undergoing appraisal. This shows the borrower, purpose, and amount 'available for utilisation'. Both data sets are frequently updated. This analysis includes LOCs that in their project description report a solar project. Also included are three LOC where EXIM Bank's data specifies only 'rural electrification', but MEA data shows these were solar-based rural electrification projects, as well as part of one EXIM Bank LOC which include multiple project components, where MEA data allows the solar element of the project to be identified. A small number of LOCs are listed as 'general purpose', which may include a solar component, but this cannot be ascertained.

EXIM Bank's operational LOCs list shows eight LOCs for solar projects, totalling US \$275 million, with completed appraisals, and which are now undergoing tendering to select companies to fulfil them (see Chart 3). It can be assumed that these projects will proceed, but this is not guaranteed.

Combined EXIM Bank and MEA data shows LOCs totalling US \$1,216 for projects which are still to undergo technical and financial appraisal. EXIM Bank's list of 'pipeline' LOCs shows solar projects totalling US \$560 million. MEA data reports a further US \$656 million of projects, for which there is not yet any EXIM Bank record, suggesting they remain at an early stage. Chart 4 shows the breakdown between EXIM Bank's recorded operational LOCs, which includes LOCs that are complete, under implementation, or ready to proceed, EXIM Bank's pipeline LOCs, and LOC reported by the MEA with no equivalent EXIM Bank record.

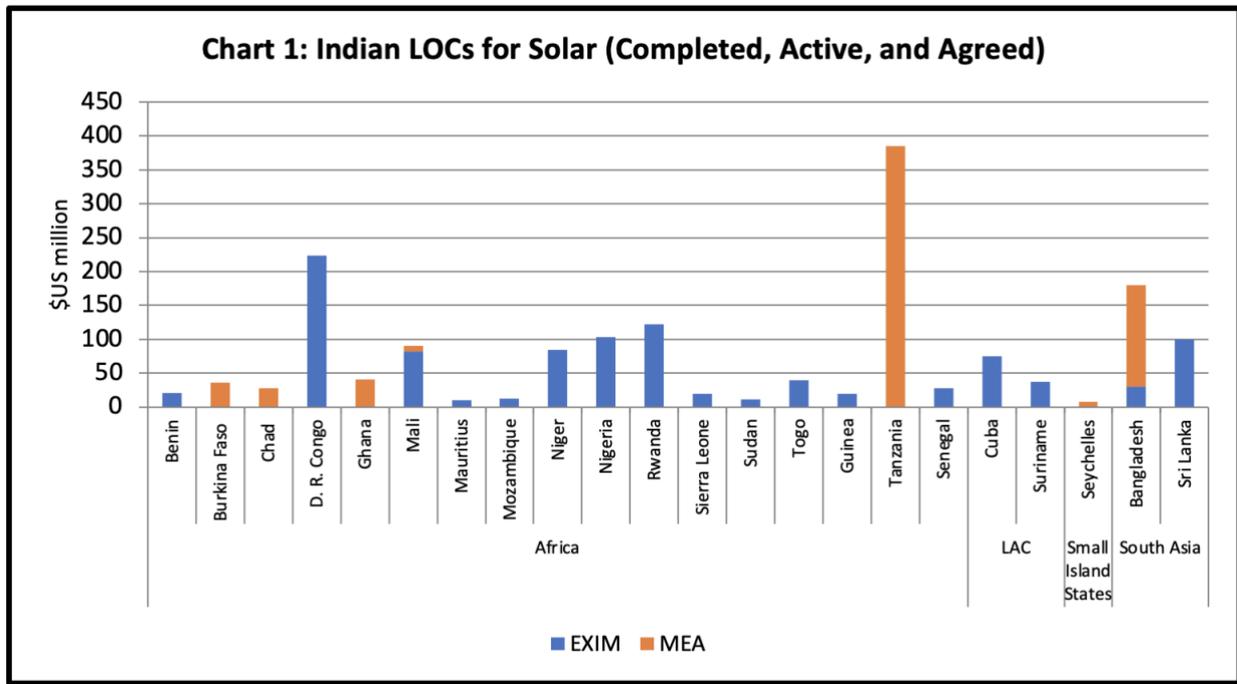
Looking at only EXIM Bank data on India's concessional lending for power sector projects shows a pronounced shift in IDEAS' commitment to solar (see Chart 5). A minority of power sector LOCs that are complete or under implementation were for solar projects. Historically, IDEAS has funded a wide range of solar, wind, hydro, and thermal projects. In contrast, LOCs for solar projects make up a much larger share of those that are ready to proceed (are

² India's MEA has published two lists on concessional lending for solar projects. One lists historical lending and the second LOCs announced at the launch conference of the ISA. Some of these match LOCs in EXIM Bank's data, while others are similar, suggesting the same project, but either report a slightly altered project value or project description. Where LOCs align, or are very similar, they have been merged for this analysis, with EXIM's data on project value used above MEA data where there are value discrepancies. For a comprehensive analysis of the complexities in reporting EXIM Bank's data, see Bhatia (2021).

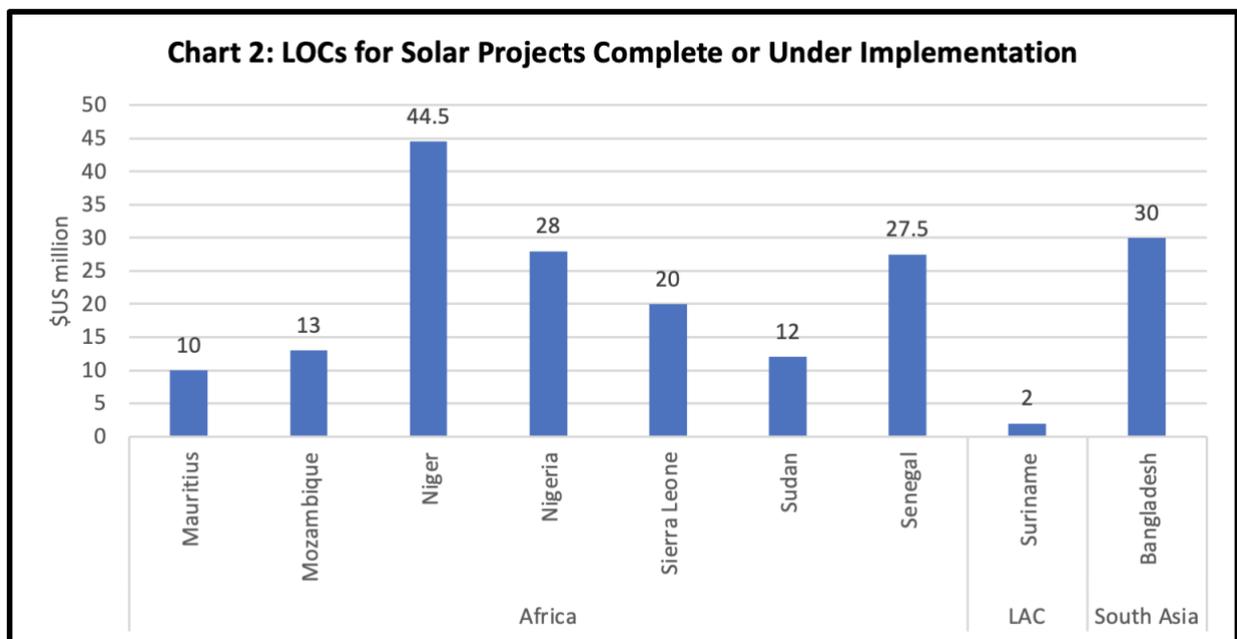
³ EXIM Bank does not report directly the status of LOCs. For this analysis, complete and under implementation projects are ascertained from whether EXIM Bank's operative LOCs are listed as available for procurement. Where a LOC is listed as 'yes', this means that EXIM Bank is still carrying out bidding for an Indian company to deliver the project. Where a LOC is listed as 'no', the project is either complete or are being implemented.

open for bidding by Indian companies) or are at a pipeline stage. The shift would be even more pronounced, if the US \$656 of LOCs for solar projects

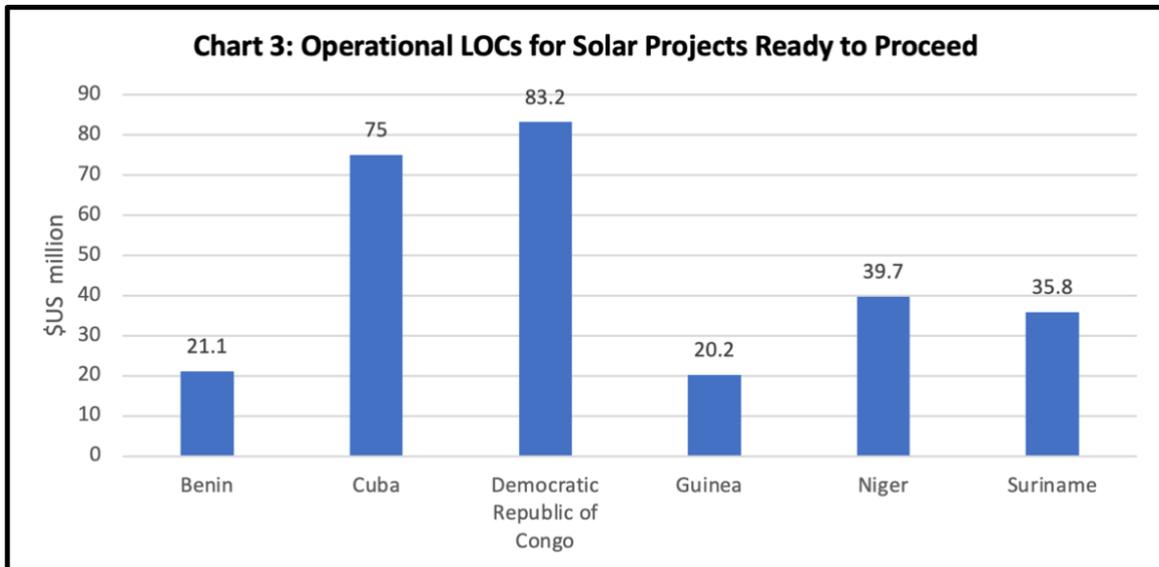
announced by the MEA, but with no EXIM Bank record, were included.



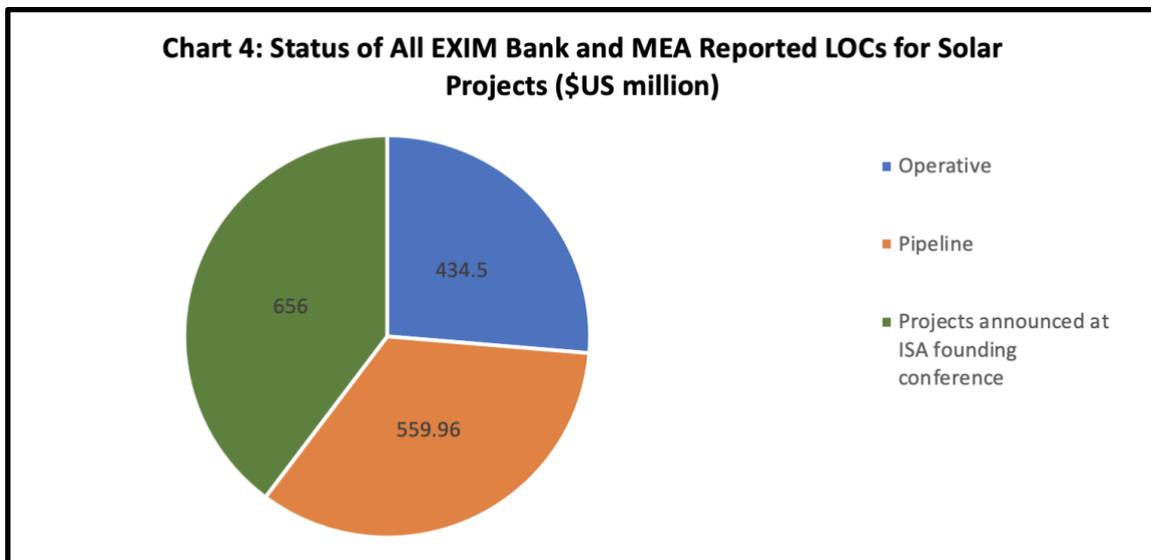
Source: Statistics collected by the author from EXIM Bank and the MEA in 2021.



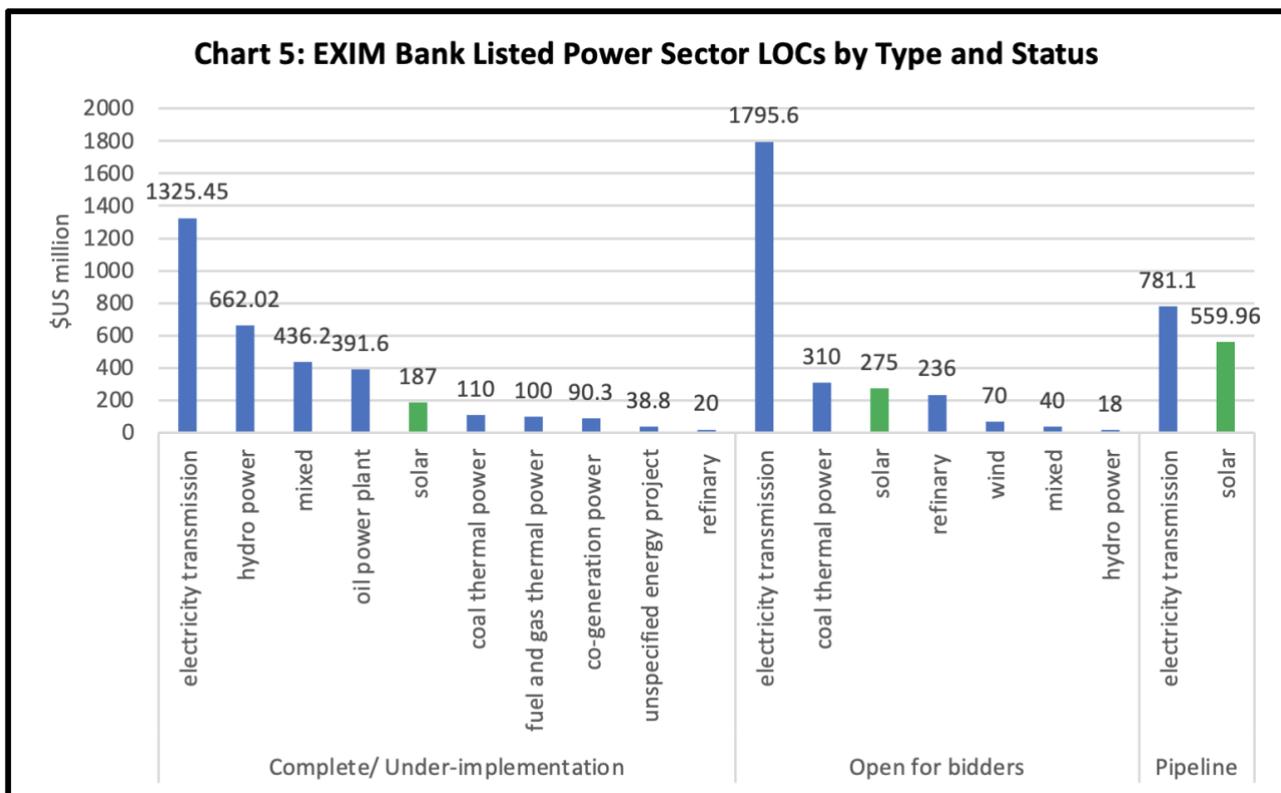
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Trends of India's financing of solar

Regional Orientation

India's financing of solar projects is notably focused on West Africa: both in terms of completed and planned projects. Pre-dating the ISA, India extended LOCs for solar projects to Nigeria, Niger, Sierra Leone, and Senegal. Since 2017, new LOCs have been agreed with Benin, Burkina Faso, Chad, Ghana, Guinea, Mali, Niger, Nigeria, Rwanda, and Togo. The expansion of Indian development cooperation in West Africa by way of offering concessional financing has been written about for a number of years now (for example, see Singh 2007, Vittorini and Harris 2011). Solar appears to be a promising emerging area of development cooperation. Notably, LOCs are being agreed with French speaking countries, with which India has traditionally had less close relations than eastern and southern African countries (Vittorini and Harris 2011).

Part of the opportunity here comes from India's partnering with France in leadership of the ISA, which has strong relationships in the region. South Asia is a second regional focus, with Sri Lanka, Bangladesh, and Mauritius all having agreed new LOCs for solar projects since 2017. Sri Lanka and Bangladesh have each been offered LOCs above US \$100 million and \$150 million respectively, which represent much larger value LOCs for solar projects than India typically offers.

There are surprising absences from India's expanded concessional lending for solar. India appears not yet to be financing solar projects in Indian and Pacific Ocean island states, except for the Seychelles, even as India is prioritising building diplomatic ties with these county groupings. This looks set to change, with a 2019 announcement from Prime Minister Modi that India had offered a US \$150

million LOC to the India-Pacific Islands Developing States Group of nations, for solar, renewable energy, and climate related projects (Verma 2019). However, agreed projects have not yet been announced. To date, India has not agreed LOCs for solar projects in East Africa, other than for Tanzania. Given India's strong development cooperation with countries in the region, such as Kenya, Sudan, and Ethiopia, this absence is surprising.

Other countries offered LOCs since 2018 are those with which India has a record of extending concessional financing, including: Suriname, Cuba, and the Democratic Republic of Congo. In 2019, Modi announced India was offering a US \$150 million LOC to the CARICOM group of Caribbean states for solar and renewable projects (Chaudhury 2019), but there are not yet any corresponding agreed projects in EXIM Bank or MEA data.

Strong with off-grid and small-scale solar, ambition for on-grid solar

India's historical LOCs and around half of those agreed since 2017 are for ad hoc projects to deliver off-grid solar technology, rooftop solar, and to build micro-grids or small-scale solar systems. IDEAS' track record of financing power sector transmission and rural electrification infrastructure appears to make India well placed for these kinds of projects. It is Indian companies with a history of working on Indian-funded projects for transmission infrastructure and rural electrification that have been taking on off-grid and small-scale solar projects. In addition, it is in countries where India has financed transmission, electrification, and power sector work where India is reaching agreements to now also support solar projects. Countries India wants to work with in Africa, the Indian Ocean Region, the Pacific, and South Asia all have plans and potential for off-grid and decentralised solar-based infrastructure. India should be well placed to partner for new projects in the coming years, given Indian firms are already operating through these regions, and on a range of power sector projects.

India's concessional lending is now also being oriented towards funding larger solar parks. In 2018,

the MEA announced agreed LOCs for several solar parks: US \$385 million to Tanzania for a 150 MW park, US \$150 million to Bangladesh for a 100 MW solar plant, US \$75 million to Cuba for solar parks totalling 75 MW, and US \$100 million to Sri Lanka, half for rooftop solar and half for a floating solar park. Indian firms already have a strong record in developing privately financed solar parks internationally, and so are well placed to deliver these projects. India's financing of larger solar parks raises the possibility of significant opportunity for Indian solar module manufacturers, given that LOCs are tied to Indian goods and services. Financing more and bigger projects therefore aligns with the Indian government's domestic agenda to promote solar manufacturing. Yet, in 2020 Indian manufactured solar modules were nearly 33 per cent more expensive than Chinese counterparts (Jain, Dutt et al. 2020). Solar modules represent the majority of cost of large solar parks, so until Indian manufacturers become more cost competitive, the cost of Indian modules may outweigh the benefits of the low cost of Indian concessional finance. While the Indian government looks to be enthusiastic about financing large solar parks, diplomatic and geopolitical risks lie in advocating for partner countries to agree LOCs that involve more expensive Indian modules (Balls 2020).

Limited alignment between IDEAS and the ISA

While Modi's government clearly wants to orient IDEAS to support the ISA, the LOCs that India has agreed with countries so far are notable for involving diverse ad hoc projects, and there is relatively little evidence of alignment with new ISA programmes. There is no shortage of potential alignments. Firstly, the ISA has a high-profile programme to aggregate demand between ISA member states for off-grid solar technologies, with the aim of ordering large quantities at lower costs than any single member could secure. So far, a tendering process has 'discovered' the lowest price for solar powered water pumps for irrigation, and a second is planned for household solar home systems. The first tendering process saw mostly Indian manufacturers participate. However, ISA member states are yet to actually purchase any of these technologies. Indian LOCs would seem to have been a

likely source of finance for these. Second, the ISA is facilitating project preparation and development for a number of solar parks in member countries. The Indian state-owned energy utility NTPC Ltd. has been awarded contracts to do this work, including most recently projects in Mali and Togo. Indian LOCs are not being used for these, even while other financing is yet to be confirmed.

Aligning Indian concessional lending with the ISA will be a challenging task. IDEAS was set-up according to South-South cooperation principles, in particular such that the borrowing party can request finance for their own chosen projects, and develop these themselves, without policy conditionalities. This has been a key element of the scheme, and has made it popular (Dye 2021). EXIM Bank's data on lending for solar projects reflects this: agreed LOCs to date are funding diverse projects, from solar powered base stations for mobile phone masts in Bangladesh and solar powered irrigation in Mali, to solar-diesel hybrid micro-grids for remote villages in Suriname and a 50 MW solar plant in Nigeria. While the Indian government has used Indian concessional lending to support its businesses to enter new markets, and the Indian government and Indian companies clearly often advocate for certain projects, India's concessional financing has continued to hold centrally to its South-South principles (Harris and Vittorini 2018).

An easy assumption is that if the Indian government wants to finance more solar projects, then it is in India's hands to make this happen. But this ignores that IDEAS is oriented to the borrowing parties choosing projects, and that the borrowing party has to want projects, and be willing to take on the associated debt burdens. The ISA has been encouraging African member country governments to take advantage of EXIM Bank funding during expert team technical visits (see ISA 2021). India's recently established Project Preparation Facility, to help countries to identify and develop proposals for solar developments, would be a further mechanism to promote projects aligned with the ISA. However, more understanding is needed on what India, the ISA, the MEA, and Indian companies are doing to advocate for partner countries to plan and

seek funding for solar projects, and whether and how different parties are seeking to advocate for certain kinds of projects.

Challenge of assessing the 'success' of India's financing of solar

Viable and Timely Projects

Indian politicians and diplomats, and commentators writing on Indian development cooperation, frequently critique other lenders' opaque lending practices, policy conditionality, and lending that leads to debt traps, framing India's development cooperation as different. For example, in a recent piece comparing Indian and Chinese partnerships in Africa, Mishra (2019) wrote that: "While certainly it is important to engage in nuanced debates on African debts that is not driven by 'Chinaphobia', one cannot deny the opaque nature of most Chinese contracts which are mostly not visible to or available for public scrutiny." However, Indian lending also has shortcomings in terms of transparency. Ascertaining firm numbers on India's concessional lending for solar projects is hard, and at times impossible, with different data sets providing contrasting information. Contacts are not public, and India does not publish information about the status of projects, whether projects were implemented as described and at the costs listed, or on what outcomes were achieved. Whether all projects are implemented, or some stall and are cancelled, is not known. Bhatia (2021) shows in depth the difficulty of assessing India's concessional lending.

Accordingly, how well Indian LOCs for solar projects agreed at a political level are translating into viable projects remains unclear, and attributes of success of India's financing of solar internationally cannot be assessed. For most of the newer LOCs, progress is unknown. For example, the MEA announced in 2018 a LOC of US \$385 million for Tanzania. This is the largest financing of a solar project that India has agreed, and adds significantly to the headline figures of expanded Indian concessional lending. But since 2018, no further information has

been released by the Indian or Tanzanian governments, and it is unclear at what stage of implementation the project is, or whether it might have stalled. Historically, IDEAS has faced challenges with implementation and the viability of projects (Saxena 2016, Dye 2021), and it seems likely Indian funded solar projects will have faced challenges. Researching solar projects that have been completed or are under-implementation, based on limited reporting, reveals Indian funded projects that often have different capacities and costs from what EXIM Bank and MEA information reports. For example, this is the case with projects in Niger, Nigeria, and Chad. As the Indian government seeks to make India a key player internationally in driving solar development, it should increase transparency on the projects it funds.

Development Outcomes

With little information published on projects, there is no transparency about development outcomes. The Indian government frequently speaks about how its development cooperation with partner countries is oriented towards delivering human development outcomes (Viswanathan and Mishra 2019). It also frequently talks about its desire to work with others on delivering universal and equitable energy access (MEA 2018). Yet, little is known about what parameters of success are targeted with financed projects, or whether these were achieved. With governments around the world increasingly focused on investing in renewables in order to drive economic and development goals, transparency will be critical if a just energy transition is to be achieved. The current situation not only raises questions of transparency and accountability (Waisbich and Mawdsley 2021), but also means there is little opportunity to learn from the models of Indian financed solar projects.

A key feature of India's development cooperation through IDEAS has been that as well as financing projects, India works with partner countries on technology and knowledge transfer (Harris and Vittorini 2018). This has made Indian concessional lending popular. As India looks to scale-up its cooperation internationally on solar and renewables more broadly, a unique selling point for India is that it promises to invest in the sharing of knowledge, training, and institution building (for example, see Viswanathan and Mishra 2019). As yet, however, little is known about how India is doing this with its concessional financing of solar projects. On this, there is a clear space for research that examines Indian concessional lending, and associated technology and knowledge transfer.

Conclusion

The Indian government is committed to expanding the financing of solar projects overseas through IDEAS. This is clearly intended to support the nascent ISA, but also can be read as supporting broader Indian diplomatic, geopolitical, and economic agendas. This paper shows the regional focus of India's financing of solar projects, its focus on off-grid solar and small solar parks together with its ambitions on large solar parks, and how lending is yet to be aligned with the ISA. While EXIM Bank and MEA data is revealing, this paper highlights the difficulty in assessing mainstream parameters of success of India's financing of solar projects. With the Indian government and EXIM Bank releasing limited information on financing and projects, little can be said on the design and viability of projects, their implementation, or whether projects deliver sustainable and inclusive energy, involve technology and knowledge transfers, or contribute to just energy transformations.



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Bibliography

- Balls, J. (2020). Exporting Solar to the World: Prospects for India and the International Solar Alliance. IUKDPF Analysis Paper. Cambridge, Margaret Anstee Centre.
- Bhatia, J. (2021). Understanding Indian Development Finance: The Data Complexities of EXIM Bank's Lines of Credit. IUKDPF Analysis Paper. Cambridge, Margaret Anstee Centre.
- Chaudhury, D. R. (2019). India announces \$ 14 million grant for Caribbean Island states; to support capacity building. The Economic Times. 26 September. Available at: <https://economictimes.indiatimes.com/news/politics-and-nation/india-announces-14-million-grant-for-caribbean-island-states-to-support-capacity-building/articleshow/71304721.cms?from=mdr>
- Dye, B. (2021). Uneven Convergence in Development? The Case of India's Lines of Credit to Africa. FutureDAMS/ IUKDP Working Paper 014. Manchester, The University of Manchester.
- Harris, D. and S. Vittorini (2018). 'Taking 'development cooperation' and South-South discourse seriously: Indian claims and Ghanaian responses.' *Commonwealth & Comparative Politics* 56(3): 360-378.
- ISA (2021). "Expert Team Mission Reports." Available at: <https://isolaralliance.org/publications/team-mission-reports>.
- Jain, R., Dutt, A., and Chawla, K. (2020). Scaling Up Solar Manufacturing to Enhance India's Energy Security. New Delhi, CEEW.
- MEA (2018). "List of solar projects under GoI-LOCs for announcement at ISA Founding Conference." Available at: <https://www.mea.gov.in/bilateral-documents.htm?dtl/29606>.
- MEA (2018). "Project Preparation Facility for Government of India (GoI) Lines of Credit (LOCs)." Available at: https://www.mea.gov.in/bilateral-documents.htm?dtl/29603/Project_Preparation_Facility_for_Government_of_India_GoI_Lines_of_Credit_LOCs.
- MEA (2018). "Transcript of Media Briefing on Founding Conference of ISA." 11 March. Available at: https://www.mea.gov.in/bilateral-documents.htm?dtl/29603/Project_Preparation_Facility_for_Government_of_India_GoI_Lines_of_Credit_LOCs.
- Mishra, A. (2018). The Changing Nature of India's Lines Of Credit to Africa. New Delhi, Observer Research Foundation. Available at: <https://www.orfonline.org/expert-speak/changing-nature-india-lines-of-credit-africa/>.
- Mishra, A. (2019). How Indian and Chinese Involvement in Africa Differs in Intent, Methods and Outcomes. New Delhi, Observer Research Foundation. Available at: <https://www.orfonline.org/expert-speak/how-indian-and-chinese-involvement-in-africa-differs-in-intent-methods-and-outcomes-55574/>.
- Saxena, P. (2016). India's credit lines: instrument of economic diplomacy. In S. Chaturvedi and A. Mulakala. *India's Approach to Development Cooperation*. London, Routledge.
- Singh, S. K. (2007). India and West Africa: A Burgeoning Relationship. Africa Programme/ Asia Programme Briefing Paper. London, Chatham House.
- Verma, A. (2019). Modi Announces \$150 mn LOC for Pacific Island Nations to Undertake RE Projects. Saur Energy. 26 September. Available at: <https://www.saurenergy.com/solar-energy-news/modi-150-mn-loc-pacific-island-nations-undertake-re-projects>. Last Accessed on 29 March 2021.
- Viswanathan, H. and A. Mishra (2019). The Ten Guiding Principles for India-Africa Engagement: Finding Coherence in India's Africa Policy. New Delhi, Observer Research Foundation. Available at: <https://www.orfonline.org/research/the-ten-guiding-principles-for-india-africa-engagement-finding-coherence-in-indias-africa-policy/>.
- Vittorini, S. and D. Harris (2011). 'India goes over to the other side: Indo-West African relations in the 21st century.' *India in Africa: Changing Geographies in Power*. 203-217.
- Waisbich, L.T. and Mawdsley, E. (2021). The 'Accountability Politics' of Indian Development Cooperation. IUKDPF Analysis Paper. Cambridge, Margaret Anstee Centre.

Appendix A: Table of Indian LOCs for solar projects

Region	Country	Project	Value (US millions)	Date	Status	Data Source
Africa	Benin	Electrification of 750 communities in Benin	21.1	2018	Operative - open for bidders	EXIM
Africa	Burkina Faso	Solar powered water stations for semi-urban water supply	36.5	2018	Projects announced at ISA founding conference	MEA
Africa	Chad	Establishment of a Solar PV module manufacturing plant at N'djamena	27.5	2018	Projects announced at ISA founding conference	MEA
Africa	DRC	15 MW solar photovoltaic power project in Karawa province	33.3	2019	Operative - open for bidders	EXIM
Africa	DRC	10 MW solar photovoltaic power project at Lusambo province	25.3	2019	Operative - open for bidders	EXIM
Africa	DRC	10 MW solar photovoltaic power project in Mbandaka, Province – Equator	24.6	2019	Operative - open for bidders	EXIM
Africa	DRC	Installation of 15 MW Solar Photovoltaic Power Project at Tshilenge (Mbuji-Mayi)	56.8	2019	Pipeline	EXIM
Africa	DRC	Installation of 10 MW Solar Photovoltaic Power Project at Manono	26.7	2019	Pipeline	EXIM
Africa	DRC	Installation of 15 MW Solar Photovoltaic Power Project at Gemena	56.8	2019	Pipeline	EXIM
Africa	Ghana	Solar powered Street Lighting Project	34.8	2018	Projects announced at ISA founding conference	MEA
Africa	Ghana	Solar powered mini-grids for island and forest zone communities	6.3	2018	Projects announced at ISA founding conference	MEA
Africa	Guinea	Solar projects. (MEA: Solar Project for Supply of Electricity and Drinking Water for 7 Public Universities / 5.8: Solar Project for Electrification and Refrigeration in 200 Health Infrastructures)	20.2	2019	Operative - open for bidders	EXIM
Africa	Mali	Construction of 2 MWc Solar Photovoltaic plants in Mopti	8	2018	Projects announced at ISA founding conference	MEA
Africa	Mali	Setting up of sustainable Village and use of solar Photo-Voltaic Technology for irrigation of 2500 hectares of agricultural land	22	-	Pipeline	EXIM
Africa	Mali	50 MW Solar Photovoltaic Power Plant at Fana, Mali	60.7	-	Pipeline	EXIM
Africa	Mauritius	Construction of 8MW Solar Power Plant at Henrietta	10	2017	Operative - Complete/ Under implementation	EXIM
Africa	Mozambique	Solar Photo Voltaic Module Manufacturing plant	13	2011	Operative - Complete/ Under implementation	EXIM
Africa	Niger	Rural Electrification of 50 villages through Solar Photovoltaic (SPV) system in Niger	10	2011	Operative - Complete/ Under implementation	EXIM
Africa	Niger	Solar electrification of 30 villages	34.5	2013	Operative - Complete/ Under implementation	EXIM
Africa	Niger	Electrification of 250 rural communities in Niger	39.7	2018	Operative - open for bidders	EXIM
Africa	Nigeria	Solar Mini Grid Electrification and Solar Street Lighting Project in the Kaduna State	28	2014	Operative - Complete/ Under implementation	EXIM
Africa	Nigeria	Two Solar Projects, (i) 50 MW power plant Bauchi, GON (USD 66.60 mn), (ii) Solar PV renewable Energy Micro Utility (REMU) in six political zones, USD 8.36 mn	74.96	2020	Pipeline	EXIM

Africa	Rwanda	Two Solar Projects	122	-	Pipeline	EXIM
Africa	Senegal	Rural Electrification project	27.5	2011	Operative - Complete/ Under implementation	EXIM
Africa	Sierra Leone	Solar Street Lighting project in Sierra Leone	20	2010	Operative - Complete/ Under implementation	EXIM
Africa	Sudan	Solar photovoltaic module manufacturing plant/ Supply of equipment for Solar Electrification/ Solar Photovoltaic Modules	12	2004	Operative - Complete/ Under implementation	EXIM
Africa	Tanzania	Development of 150 MWp Solar PV Farm at Shinyanga Region, Kishapu District.	385	2018	Projects announced at ISA founding conference	MEA
Africa	Togo	Electrification of 350 villages through solar photo voltaic systems	40	-	Pipeline	EXIM
LAC	Cuba	Installation of 75MWp Photovoltaic Solar Parks	75	2019	Operative - open for bidders	EXIM
LAC	Suriname	HF Communication Equipment, Solar Lanterns	2	2005	Operative - Complete/ Under implementation	EXIM
LAC	Suriname	Rural Electrification through solar DG hybrid PV systems in 50 remote villages of Suriname	35.8	2020	Operative - open for bidders	EXIM
Small Island States	Seychelles	Solar LED street lighting project in Mahe, Praslin and La Digue	0.6	2018	Projects announced at ISA founding conference	MEA
Small Island States	Seychelles	Solar Rooftop PV Project for Government Buildings in Seychelles	3	2018	Projects announced at ISA founding conference	MEA
Small Island States	Seychelles	2 MW (1MWx2) Solar Power Plant with Battery Storage in Praslin and La Digue	4	2018	Projects announced at ISA founding conference	MEA
South Asia	Bangladesh	Solar Based Base Stations for Strengthening teletalk Network project	30	2017	Operative - Complete/ Under implementation	EXIM
South Asia	Bangladesh	Setting up of Mollahat 100 MW Solar PV power plant	150.3	2018	Projects announced at ISA founding conference	MEA
South Asia	Sri Lanka	Projects in Solar Energy Sector	100	2020	Pipeline	EXIM

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