Govt. of Jharkhand
Rural Development Department
Jharkhand State Livelihood Promotion Society
2nd Floor, JSAMB Building, Itki Road, Hehal, Ranchi - 834005, Jharkhand
Phone No. 0651-2951915/2951916
Email – joharjharkhandproc@gmail.com, Website – www.jslps.in

No: JSLPS/968 **Date:** 26.04.2023

Proc. Ref. No. : IN-JSLPS-356281-CS-QCBS

REQUEST FOR EXPRESSION OF INTEREST (REOI)
for Providing Consultancy Services as Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project

Jharkhand State Livelihood Promotion Society invites "Expression of Interest" from the eligible registered consultancy agencies to submit their interest for providing consulting services as **"Technical Support Agency for Monitoring and Evaluation (M&E)"** under JOHAR Project in Jharkhand.

Interested agencies may submit their "Expression of Interest" in a sealed envelope clearly superscripted as **"Expression of Interest for Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project"** latest by ***15.30 hours on 15th May'2023***. Interested agencies may obtain further information and procedures for submitting "Expression of Interest" by downloading the REOI document from *Procurement* ➔ *Services* section of the official website of JSLPS i.e., ***www. jslps.in***.

Sd/-
Chief Executive Officer
JSLPS

Govt. of Jharkhand
Rural Development Department
Jharkhand State Livelihood Promotion Society
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No: JSLPS/968 **Date:** 26.04.2023

Proc. Ref. No. : IN-JSLPS-356281-CS-QCBS

REQUEST FOR EXPRESSION OF INTEREST (REOI)

(CONSULTING SERVICES – AGENCY SELECTION)

Assignment Title: - Providing Consultancy Services as Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project

The project titled **Jharkhand Opportunities for Harnessing Rural Growth (JOHAR)** being implemented by Jharkhand State Livelihood Promotion Society under the aegis of Rural Development Department, Government. of Jharkhand with financing from the World Bank towards the project implementation cost and intends to apply part of the proceeds for hiring of an agency to provide consulting services.

The consulting services ("the Services") include hiring of an agency for undertaking the **Consultancy Services as Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project** for a period of 12 months subject to extension of further period based on the requirement of JSLPS and performance of TSA. The details activities are mentioned in the Draft Terms of Reference (*Annexure – B*).

Jharkhand State Livelihood Promotion Society (JSLPS), now invites eligible consulting agencies to indicate their interest for providing the services. Interested agencies should provide information demonstrating that they have the required qualifications and relevant experience to perform the services.

The short-listing criteria are as follows.

a) The agency should have an independent legal existence, registered under the applicable Act. [Submit proof of Registration Certificate, Articles and Memorandum of Association].

b) The agency should have minimum 3 (three) years of experience in the relevant field of Monitoring and Evaluation (M&E).

c) The agency should have an average annual turnover of Rs. One Crore Seventy Lakhs or more during last three financial years and preferably have a positive net worth. Out of the total turnover, at least Rs. 85 Lakhs should be from similar assignment. [Relevant documents viz, audited financial statements and a certificate from Charted Accountant in support of satisfying the criteria should be submitted].

d) The agency should have prior experience and have successfully completed at least 2 similar assignments, in the last 5 years, in sectors specific to that of the proposed assignment. Experience in Government sector especially related to

livelihoods sector projects and having a working experience in Jharkhand shall be preferred. [Submit proof of Successful Completion].

e) The agency should have a well-qualified and sufficiently experienced team, in house, or should be in a position to commit about their own network/association.

Interested agencies may submit their application expressing interest in the prescribed Performa annexed herewith [Annexure – A & Annexure – A(1)] in sealed envelope with each page of the application signed by an authorised signatory, including the pages comprising the annexure.

The attention of interested agencies is drawn to paragraph 1.9 of the World Bank's *Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers* (January 2011 revised July 2014) ("Consultant Guidelines"), setting forth the World Bank's policy on conflict of interest. In addition, please refer to the following specific information on conflict of interest related to this assignment: conflict between consulting activities and procurement of goods, works or non-consulting services; conflict among consulting assignments; and relationship with Borrower's staff.

The Consultants may associate with other agencies in the form of a joint venture or a sub consultancy to enhance their qualifications. The submission should clearly indicate the type of association whether a joint venture (JV) or sub consultancy.

A Consultant will be selected in accordance with the Quality & Cost Based Selection (QCBS) method set out in the Consultant Guidelines.

Expressions of interest (in prescribed format) must be delivered in a written form only to the address below by person or through postal/courier services latest by ***15.30 hours of 15th May'2023*** by super-scribing/marking the envelope as ***"Expression of Interest for Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project"*** at the following address. Please note that EOIs shall be accepted by the aforesaid methods only within the stipulated period of submission.

Address:

The Chief Executive Officer,
Jharkhand State Livelihoods Promotion Society
2nd Floor, JSAMB Building, Itki Road,
Hehal, Ranchi - 834005, Jharkhand
Phone No. 0651-2951915/2951916
Email – joharjharkhandproc@gmail.com

Sd/-
Chief Executive Officer
JSLPS

Annexure-A

Attachment 1: Format for Submission of Information to JSLPS, Ranchi to provide consultancy services as Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project.

Submission Requirements

A – Consultant Company's Profile [Maximum 2 Pages]				
1.	Organizational	*Provide a brief description of the background and organization of your firm/entity. The brief description should include:* *(a) Ownership details* *(b) Authorized signatories name, designation, address, mobile nos., email-id etc.* *(c) Date and place of incorporation of the firm,* *(d) Objectives of the firm,* *(e) Availability of appropriate skills among staff.*		
2.	Financial: (Minimum average annual turnover of Rs. One Crore Seventy Lakhs during the last three financial years required.	*Provide the turnover as per the audited accounts of the previous three financial* years in Indian Rupees.		
		2019-20	*2020-21*	*2021-22*

B – Consultant Agency's Experience [Maximum 15-20 pages]					
1.	Experience of working on government, externally aided, or livelihoods sector projects in India. **At least 3 years of experience required.** ***Please provide details of up to 10 such assignments (you may add more rows).***				
	Name of Project	Services provided	Client and Country	Duration of Assignment	Value of Contract (Rs)

2.	Experience in providing consulting services in the relevant field (Minimum 2 similar nature of assignment:				
	Name of the Client (GoI/Externally Aided Project)	Nature of the assignment	Location and coverage (entire state, country, etc.)	Duration of Assignment (In month)	Value of Contract (Rs. Lakh)
	Please enclose copy of the contract as evidence				

3.	Two Experts to be proposed with experience in government, externally aided, or livelihoods sector projects and specifically with leading similar nature of assignment in accordance with the draft TOR at-least for a period of 3 years. Detailed CVs are not required at this stage, it should be submitted if the agency qualifies for RFP stage. Among other information, the brief CVs should include the following information in the following format:			
	Name of the proposed Expert			
	Designation			
	Experience			
	Name of Project	Experience	Client and State	Duration of Assignments (In month)

If the Consultant has formed a consortium, all the above details of each member of the consortium and the name of the lead partner, shall be provided.

Annexure – A(1)

Declaration

Date: __/__/_____

To whom so ever it may be concern

I/We hereby solemnly take oath that I/We am/are authorized signatory in the firms/ Agency/ Institute/ Company and hereby declare that "Our firms/ Agency/ Institute/ Company do not face any sanction or any pending disciplinary action from any authority against our firms/ Agency/ Institute/ Company or partners." Further, it is also certified that our firm has not been blacklisted/debarred by any government or any other donor/partner organization in past.

In case of any further changes which effect of this declaration at a later date; we would inform the JSLPS accordingly.

Authorized Signatory

(with seal)

ANNEXURE – B

Draft Terms of Reference for Technical Support Agency for Monitoring and Evaluation (M&E) under JOHAR Project .

1) **BACKGROUND:**

Jharkhand State Livelihood Promotion Society (JSLPS) is an autonomous society functioning under the aegis of Department of Rural Development, Government of Jharkhand. The society is created to serve as a special purpose vehicle for smooth implementation of poverty alleviation schemes and programs in the state. Currently, the society is implementing multiple poverty alleviation programs supported by Govt. of India, State's own funds and funds from other agencies. The major programs implemented by JSLPS are; Dindayal Antyodya Yojana-National Rural Livelihood Mission (DAY-NRLM), and Initiative for Horticulture Intervention by Micro Drip Irrigation (JHIMDI). The core strength of the society lies in its competent team of professionals and thematic experts deployed at the state, district, block and village level who have strived to build and support strong and vibrant community institutions.

JSLPS is the implementing agency for the Jharkhand Opportunities for Harnessing Rural Growth (JOHAR) project. JOHAR's objective is to enhance and diversify household income in select farm and non-farm sectors for over 2 lakh targeted beneficiary households in project areas.

Currently, JOHAR is implemented in 68 blocks spread over 17 districts of the state. As of February, 2023, the project has reached 2,24,286 households through 3,875 rural producer collectives commonly called as Producer Groups (PG). Around 75 per cent of project beneficiaries are dependent on High Value Agriculture (HVA) as the main livelihood activity in JOHAR. Other livelihood activities promoted in JOHAR are livestock- Goat, Pig and Back yard poultry, Fishery and Non-Timber Forest Produce (NTFP). The project beneficiaries in HVA are supplemented with irrigation facilities at the PG level and as of February, 2023; 7982 hectares of land for 18,955 project beneficiaries have access to irrigation facilities from the project.

1.1.1 About the project-JOHAR

Government of Jharkhand with funding support from the World Bank is implementing JOHAR Project since 2017. The project is based on rural livelihoods programme, leveraging the existing community institutions established under DAY-NRLM. The seven-year project (including 1 year project extension) aims to bring transformative changes in the lives of over 200,000 targeted families. The project development objective is: - "Enhanced and diversified household income in select farm and non-farm sectors for targeted beneficiaries in Project Area".

The key areas of interventions implemented under JOHAR are:

a) JOHAR uses the existing social mobilization base of DAY-NRLM and establishes Producer Groups (PGs) and Farmer Producer Organisations (FPOs).
b) High Value Agriculture (HVA) intervention focuses on enhancing the production by use of scientific technology, introduction of improved variety of seed and increasing cropping intensity through provisioning of irrigation systems.
c) In order to increase the cropping intensity and bring new cultivable area under HVA, irrigation facilities like solar, diesel and electric pumps with or without intake well, drip irrigation, moveable irrigation system will be implemented in identified blocks or clusters.
d) For promotion of livestock development, the intervention focus is to improve the productivity of small ruminants by promoting backyard poultry, broiler & layer, goat rearing and pig rearing.
e) Existing water bodies like ponds, tanks and reservoirs are brought under improved pisci-culture, cage culture, and pen culture through improved hatchery management, seed production, input supply and other equipment supply for promotion of fisheries.
f) For the promotion of Non-Timber Forest Produce (NTFP), the project adopts the value chain approach, whereby the project collectivises the community so that aggregation, storage, and processing of NTFP fetches higher returns.

g) The project builds the capacities of existing producers on various package of practices for the promotion of skills and enterprises
h) In order to ensure higher price realisation per unit of produce, JOHAR works on both forward and backward linkages, by collaborating with input suppliers and market players to promote agri-business and private sector engagement
i) As a production augmentation and risk minimisation strategy, the project provisions crop, weather and market advisory services.
j) In order to ensure access to finance, project have provision to provide initial institutional financing to community institutions and also ensure linkages with Banks and other financial institutions for credit access.

1.2 PROJECT IMPLEMENTATION MECHANISM:

JSLPS is the core implementing agency for JOHAR with a dedicated State Project Management Unit (SPMU) and a committed team of professionals at the state, district and block levels has been deployed. Since, the project draws on and leverages the strengths of the other government departments and schemes, especially NRLM, it works with senior government officials from the allied line departments and market to establish a seamless functioning mechanism.

1.3 MONITORING, LEARNING, AND EVALUATION UNDER THE PROJECT TILL DATE:

Due to the diversity and complexity of the project, the JOHAR project, for its concurrent learning, has an embedded full-time monitoring and evaluation cell within its SPMU to promote a culture of result-based monitoring and provide evidence-based decision-making inputs of both strategic and operational nature, at all levels including community institutions.
The JOHAR M&E team has undertaken and completed the following M&E activities:

a) Development of Monitoring, Learning, and Evaluation (MLE) framework
b) Experimental and quasi-experimental design for project impact evaluation[1]
c) Pre-analysis plan and survey instruments for baseline survey[2]
d) Baseline survey and report[3] undertaken in year 2018 covering 6000 HHs.
e) Mapping of JOHAR implementation processes and process indicators
f) Establishment of process monitoring system and development of data collection instruments
g) Seven quarterly process monitoring rounds (Attached as Annex- 4)
h) Development of process monitoring handbook
i) Nine demand-based rapid assessments and analytics completed (Attached as Annex-4)
j) An analytical study of 1200 households completed in year 2021 as part of the Mid Term Review (MTR) of the project.
k) Prepared MTR report for JOHAR
l) Published 2 blogs [4]
m) Developed 2 learning notes published by World Bank.

1.4 PLANNED MLE ACTIVITIES:

Over the remainder of the project period, the following M&E activities are planned under the project:

a. Project impact evaluation
b. Project completion report

2) PURPOSE OF THE ASSIGNMENT:

JOHAR is a multi-sectoral project with several sub-components and activities. JSLPS has a long and successful history of implementing innovative programs and monitoring them. However, due to the complex and innovative nature of JOHAR Project, JSLPS needs to

[1] http://jslps.org/wp-content/uploads/2018/02/JOHAR-IE-design_May-2018.pdf
[2] http://jslps.org/wp-content/uploads/2018/02/JOHAR-IE_Pre-analysis-Plan_June-2018-1.pdf
[3] http://jslps.org/wp-content/uploads/JOHAR-IE-Baseline-Report.pdf
[4] https://www.aesanetwork.org/good-practices-48-the-importance-of-extension-services-in-large-scale-government-projects-case-studies-from-johar-project-in-jharkhand-india/

regularly evaluate the key community-driven and livelihoods innovations and eventually scale-up the most effective and replicable activities. Continued support to the project from an embedded monitoring and evaluation cell would enable the project to be data-driven and learn based on rigorous evidence. Keeping this in mind JOHAR project had hired a Technical Support Agency (TSA) to work with their M&E cell and strengthen the M&E implementation. Now project is in its last phase and project endline is planned to be conducted around Kharif- 2023.

JSLPS is looking for a competent consulting agency having in-depth and rich experience of leading Impact evaluation and M&E implementation of Agri and Agri allied related large-scale projects for conducting the endline evaluation survey of the project. The agency should have prior experience in designing and implementing Randomized Controlled Trials (RCTs) and Quasi Experimental based impact evaluation of large scale projects, and which will operate in the embedded M&E cell within the JOHAR-SPMU and would be responsible for undertaking and completing all the activities mentioned earlier above as M&E activities planned under the project for the remainder of the project period.

3) SCOPE OF THE ASSIGNMENT:

Agency will be required to undertake the planned activities like monitoring and supervision of data collection agency, hired for data collection of endline survey, support data collection firm in training of field team and CAPI development, ensure rigorous data quality monitoring and management, data analysis, preparing technical endline report and presentation of key findings, and prepare final project completion report for JOHAR Project.

3.1 Project impact evaluation

The project impact evaluation aims to generate evidence on effects of JOHAR on the target households. It covers the main impact indicators of the project;

- The increase in average annual real household income of targeted households.
- The proportion of real income that comes from selected livelihood sources prioritized by JOHAR (Refer **Annex-3** Result Framework).

The impact evaluation includes remaining endline survey rounds in JOHAR. The impact evaluation of JOHAR project will focus on the project blocks with High Value Agriculture (HVA) interventions of JOHAR project. The impact evaluation will follow a cluster RCT using “internal controls” and quasi-experimental evaluation technique using “external controls”. A baseline survey was carried out in 2018 to estimate the precise impact of the JOHAR project interventions. The JOHAR baseline survey was carried out to only include the High Value Agriculture (HVA) sub-component of the JOHAR project as per the impact evaluation design. Impact evaluation design is attached at **Annexure-1**, names of sampled Gram Panchayats and their random assignment will be shared with the selected agency.

3.2 Supervision and Monitoring of Project Impact Evaluation Fieldwork:

In order to maintain rigor and transparency, a separate agency will be hired for data collection of endline survey (Data collection agency ToR attached as **Annexure-2**). The TSA will supervise and monitor the entire field work of impact evaluation which will be conducted by the data collection agency. The TSA will supervise and monitor the following activities undertaken by the data collection agency:

a) Refinement, translation and finalization of survey tools.
b) Development of CAPI programs.
c) Preparation of field team training, training module, field manuals etc.
d) De-briefing sessions with field team.
e) Field movement plan.
f) Data management and data sharing protocols.
g) Data quality checks.
h) Regular monitoring of data collection field work.
i) Regular checking for variation in back check and spot check data.
j) Handover of variation log book, raw data and cleaned set of data from the agency.

The survey will be carried out in 127 Gram Panchayats (GPs) across about 36 blocks of Jharkhand and sample 7,300 households. This sample includes households that were covered

during the project's baseline survey (5,874), additional households of livestock covered during an analytical study (420 HHs) conducted post mid-term in order to report on IRI-14 as baseline survey samples are primarily from HVA domain, and additional households (1,000) for an enhanced sample to mitigate the contamination happened in the internal control group. Out of total 28 internal control GPs about 10 GPs got contaminated during the phasing of project implementation. To mitigate this contamination an additional 10 non treated GPs will be taken from internal treatment blocks and an additional 1000 households will be selected through matching. In addition to the impact evaluation design in **annexure 1**, the list of districts and blocks that form the additional control group for the impact evaluation (quasi-experimental design), and a list of districts and blocks covered for the livestock component of the analytical study are also provided.

3.3 Data analysis and final technical report of endline survey:

After completion of data collection, the TSA will be responsible for cleaning of data set as per their requirement and share the cleaned data set with JSLPS. The agency will do data analysis and will share initial presentation on key findings from the endline survey data with JSLPS and World Bank team. The agency will require to prepare a technical endline report and share the draft version with the JSLPS and World Bank team for feedback and inputs. The agency will require to share at least 3 draft version with the JSLPS and World bank team before finalizing the report. After finalizing the report agency will be required to prepare a detailed presentation of the impact evaluation findings of JOHAR project.

3.4 PROJECT COMPLETION REPORT:

A project completion report needs to be submitted by JSLPS to the World Bank towards the end of April 2024. This report will include the overall achievement of the project to the target beneficiaries and project locations. The project completion report will highlight key achievements of the project, final impact on project development objectives, track the extent of achievement of project's results framework, quantify and assess progress in each component and sub-component and report the financial structure.
The inputs for the project completion report can come from quarterly rounds of process monitoring, data from JOHAR MIS, project documents, financial reports maintained by the project, results from midline and endline surveys, findings from thematic studies and demand based quick studies, project staff interviews and case studies from the field work. For the project completion report the agency will;

- Finalise project completion report outline.
- Compile data from different thematic studies, impact evaluation, process monitoring and other sources.
- Submit technical project completion report.

3.5 Proposed PCR Outline

This is just an indicative outline of the proposed PCR. The agency will submit an outline to JSLPS for review before initiating the work.

(a) Introduction
(b) Project description
(c) Methodology
(d) JOHAR baseline and endline findings
(e) Key achievements
(f) PDO indicators
(g) Results framework
(h) Component wise achievement (with a separate section on new components post restructuring)
(i) Risks
(j) Challenges

3.6 OTHER ACTIVITIES

- Technical outputs based on data-driven findings
- Ad-hoc M&E related activities if any

4) **DURATION OF THE ASSIGNMENT & EXPECTED OUTPUT:**

The duration of the assignment would be for the remaining of the project period (12 months July 2023- June 2024). Contract can be extended based upon requirement of JSLPS and performance of TSA. The TSA would be responsible for the following outputs within the timelines:

Table 1: Deliverables with outputs

#	Deliverables	Timelines
1	Supervision and monitoring of Endline survey of 7300 households	Jul-Nov 2023
2	Draft presentation on initial key findings from Endline survey	January, 2024
3	Final project impact evaluation report[4]	March, 2024
4	Final presentation of impact evaluation findings	April, 2024
5	Project completion report[5]	May,2024

5) **TEAM COMPOSITION:**

The M&E TSA should comprise a team of researchers with expertise in carrying out rigorous impact evaluations, which is as under :

Table 2: Team composition of key and non-key experts:

#	Key Position	Roles & Responsibility	Time input (Person month)	Place of work	Qualifications & Experience.
1	Senior Evaluation Specialist-01	Responsible for designing the technical aspects of impact evaluation. Supervise and guide technical analysis and report writing.	2.5 months	Field/Home	• At least 10 years of experience in quantitative evaluation • S/he should have an advanced degree (PhD preferred) in economics/statistics/public policy or a related discipline • Specific experience in monitoring and evaluation of public policy programs for at least 5 years would be preferable • S/he should have independently led the design of a large-scale impact evaluation study (over 4,000 Households). At least one evaluation should be using an experimental or quasi-experimental technique and

[4] Draft report will be ready in mid-Jan 2024

[5] Draft report will be ready by March 2024

					should be published • S/he would spend 20% of his/her time on this project.
2	One Team Leader	Responsible for overall management, requirements, delivery and quality. Primary point of contact.	12 months	Ranchi	• S/he should have at least 8 years of experience in monitoring and evaluation of which at least 3 years of field-work experience. • S/he should have been a part of the design team of at least one impact evaluation using randomized or quasi-experimental technique and preferably should be published. • S/he should have a Post Graduate degree in economics/statistics/public policy or a related discipline. Specific experience in evaluation of and working with rural livelihoods projects would be preferable.
3	Two Data Analysts	Responsible for preparing survey instruments, analysis of information using statistical software and report writing	10 months each	Ranchi	• Four years' experience in data analysis and/or supervision of household surveys, preferably rigorous (experimental or quasi experimental) impact evaluations. • S/he should have a post-graduate degree in economics/statistics/public policy or a related discipline. • S/he should have experience and intermediate level expertise in working on statistical software packages like STATA, R, SPSS etc.
Non-Key Position		**Role in project**			**Work experience**
1	10 - Field supervisors	Responsible for monitoring and supervising the on-field data collection and ensure quality data collection for entire data collection period. Perform back check and spot check.	5 month each	Field	All field supervisor must have a degree at minimum with more than 3 years of experience and having completed minimum 2 rural household surveys. Further, all field team members must be adept at using CAPI devices, available for the entire duration of the fieldwork, have attended the training fully, and be fluent in Hindi and at least one other language spoken in Jharkhand. Experience and local

					teams of Jharkhand is preferred.
2	Consultants	Two consultants	1 month each.	As per requirement	Following people can be added to the team to achieve the key deliverables in the timelines[6]: • Senior data analyst (Quantitative methods & research specialist) • Field quality assurance and training specialist

The agency will work closely with JOHAR project staff and Team Leader and data analyst will be provided a designated office space in the JOHAR SPMU. In addition to the roles specified above, the agency may provide support from additional resources and experts for specific tasks and quality assurance.

6) **SERVICES TO BE PROVIDED BY THE CLIENT:**

The JOHAR, M&E team would continuously supervise the assignment. JSLPS would facilitate sharing of information by SMMU, DMMU, and BMMUs with the TSA, and would also ensure provision of logistic support for placement of TSA core staff in the state office. All project documents, including MIS, which are not classified documents, will be made available to the TSA for the purpose of assignment. The consultant should also provide regular feedback about progress, issues therein and inputs based on field assessment, as and when available.

7) **REVIEW OF TSA'S PERFORMANCE:**

The performance of the agency would be judged on the basis of work done against the agreed work plan. The agency will report to the Project Director – JOHAR and Chief Executive Officer, JSLPS or an Officer designated by JSLPS. The agency will generate one short summary report of its' key achievement at the end of each quarter. A committee consisting of both thematic specialists from within and outside JSLPS, as deemed appropriate, shall undertake a review of the work produced by the TSA from time to time.

8) **OWNERSHIP OF DATA AND REPORTS**

JSLPS shall be the sole owner of the outputs and other deliverables of the assignment. The TSA will have no right of claim to the assignment or its outputs. Any report/document/material produced as part of these assignments shall be deemed to be the property of JSLPS, who is funding the assignment and the TSA will not have any claim over such outputs and will not use or reproduce the contents of the documents without the explicit written permission of JSLPS.

-***-

[6] These is just an indicative list and the agency has the flexibility to add or remove from this list

ANNEXURE 1

Technical Summary of Project Impact Evaluation

The evaluation models used for impact evaluation of JOHAR project is given in detail[7].

EVALUATION MODEL 1: CLUSTER RANDOMISED CONTROL TRIAL USING "INTERNAL" CONTROLS

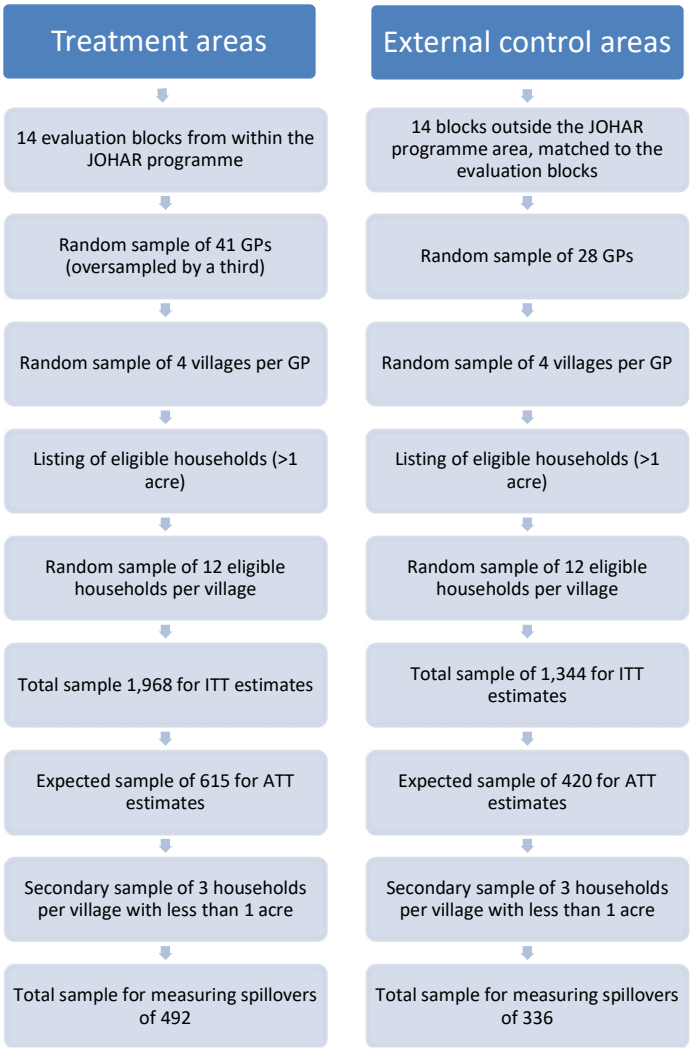

Figure 1: Design of evaluation model 1

This evaluation technique will use "internal" controls, whereby some parts of the project blocks are randomly assigned to act as control groups and will not receive the project activities (and hence act as a counterfactual to the areas that do).

This model is robust because the randomisation of treatment – if done properly – ensures that there are no systematic differences between treatment and control groups and the control groups are therefore a good counterfactual for what would have happened to the treatment groups without the intervention.

However, internal validity will not be maintained if there is imperfect implementation compliance leading to contamination or spill overs into the control areas (e.g. where farmers in control areas are able to buy improved inputs from PGs in nearby treatment areas). This will be measured at the midline to assess whether the evaluation model is still valid.

[7] http://jslps.org/wp-content/uploads/JOHAR-IE-Baseline-Report.pdf

External validity (the extent to which the evaluation results would be replicated if the project was scaled up elsewhere) is compromised by the fact that the treatment blocks have been purposively selected by the programme. This remains an evaluation limitation. **Sample Size Calculations**

As not all sampled households in the treatment areas will actually receive the intervention in practice, the effective sample for the ATT estimates will be smaller than the effective sample for the ITT estimates (which will use the full sample).

As the primary evaluation specification is the ATT estimate, the starting point is calculating the required sample for this, and then working backwards to calculate the large ITT sample

The target for the ATT estimate agreed with stakeholders during the inception phase is a Minimum Detectable Effect (MDE, the smallest observed effect that can be said with adequate statistical confidence to be significant from zero) of a 15 percentage points increase in the primary impact indicator, total annual income. The overall project target is for a 50 percentage points change. The 15-percentage points target has been calculated to be "better" than the mid-term target of the project to achieve a 20 percentage points improvement in annual income by the third year of the project. The midline of the evaluation needs to be adequately powered to assess this.

This would require a sample of 420 households per evaluation arm if divided across 28 clusters per arm; 15 per arm[8].

A cluster for this purpose is defined as a Gram Panchayat (GP), the lowest level of elected government in India that covers 5-6 revenue villages on average. For practical reasons, the allocation of treatment and control areas within the fourteen intervention blocks selected for the evaluation would need to occur at the GP level, not the village level. This is because the interventions are delivered to a group of contiguous villages roughly analogous to a GP, and it is not practically feasible to withhold treatment to individual villages within a GP (and the spill over effects would be very high if attempted) but it is feasible to withhold treatment to entire GPs. Therefore, the evaluation needs to identify treatment and control GPs, rather than treatment and control villages. The GP therefore becomes the cluster in the sampling calculations.

This random assignment at the cluster level rather than the village level impacts on the required sample to achieve a given MDE due to increasing the effect of intra-cluster correlation which reduces the statistical efficiency of a sample and its power. There are also trade-offs between having a higher number of control clusters (and reducing the impact of intra-cluster correlation, giving more power) and the practical problems this will cause the implementing teams through having more areas that they cannot implement in. 28 clusters and 15 observations per cluster was believed to be a good balance between these two competing objectives.

The underlying power calculations can be found below.

As indicated in the Terms of Reference, two illustrative indicators are used for sample size estimations: total annual income and total expenditure in the last one month[9], with the former being the primary indicator of interest. We draw on the National Rural Livelihoods Mission (NRLM) baseline data as shown in **Error! Reference source not found.** to estimate MDEs that

[8] This is based on the following assumptions: a baseline starting value of Rs 59,491; and an intracluster correlation of 0.06. Sampling parameters have been taken from secondary datasets (e.g. the NRLM baseline).

[9] The ToR suggests average per capita monthly expenditure; however, this is not available in NRLM data and therefore, total expenditure in the last month is used as a proxy.

can be achieved under different sample sizes. We assume that the standard deviation remains the same across baseline and end line.

Table 1: Baseline data assumptions

Indicator	Baseline assumptions based on NRLM baseline survey for Jharkhand data (2014)	
	Mean	**Standard deviation**
Total annual income	59491	46582
Total expenditure in the last one month	3602	2204

Note: Outliers (top 1 percentile) are dropped to ensure that sample size estimation is not skewed.

In addition, an intra-cluster correlation of 0.06 and a baseline correlation of 0.7 is assumed. As is standard, **the statistical power** of the impact evaluation is set at 80%. The cluster size required for the expected MDE is inflated in the oversampling column to 48[10]. Table 2 shows MDEs for the ATT for alternative sample sizes.

Table 2 Minimum detectable effect (ATT) and number of clusters

MDE	Cluster size	Cluster size with oversampling	Total annual income		Total expenditure last month	
			# of clusters per arm	**Total sample size per am**	**# of clusters per arm**	**Total sample size per am**
10%	15	48	62	2976	38	1824
15%	15	48	28	1344	18	864
20%	15	48	17	816	11	528

Note: Estimations done using clustersampsi in Stata 14.

Oversampling:

The next stage of the sampling calculations requires choosing a sampling rule for how households are selected at the village level. The JOHAR implementation design documents show that, in the evaluation blocks, only 22.6% of households will receive JOHAR interventions. If households were randomly sampled, then 66 households would need to be sampled to end up with 15 households who will end up receiving interventions (households that will receive the interventions have not yet been identified so are not known in advance of the baseline survey). This is extremely inefficient and will lead to a big "wasted sample". Therefore, an alternative means of identifying households who are likely to receive the intervention is required so that a smaller proportion of the sample is wasted. This method of targeting households needs to not exclude large numbers of households that will end up receiving the intervention, as this will undermine the representativeness and internal validity of the evaluation.

Three options for an improved method of targeting were considered:

[10] This oversampling is explained in the next section and accounts for the following: 10% for attrition by endline, 33% for sample loss during matching (as not all households will find adequate matches and will need to be dropped) and 48% for sample loss due to lack of take-up.

- Only selecting households with at least 0.3 acres of land (the minimum required to participate in the intervention). This was rejected as having a low targeting accuracy as 65% of households have at least 0.3 acres of land (Source: NRLM baseline survey data) and only a third of these will end up receiving JOHAR interventions. In practice, households will likely only devote 0.3 acres of land for HVA if they have substantially greater landholdings.

- Only selecting households with at least 0.3 acres of land and who are SHG members. This was rejected because SHG membership is fungible; households are likely to become SHG members to access the programme, so excluding non-SHG members at baseline is likely to exclude a large proportion of households who will end up receiving the intervention, and make the sample non-representative.

- Only selecting households with at least 1.0 acres of land. This is the preferred option. It does not exclude large numbers of households who will end up receiving the intervention (data from JSLPS shows that 80.7% of households who participate in HVA in other programmes have at least 1.0 acres of land) and improves the targeting accuracy; 48% of households who have at least 1.0 acres of land will end up receiving a JOHAR intervention.

Using the third of these options, 32 households would be needed per cluster to ensure that 15 of them ended up receiving the intervention, due to the 48% targeting accuracy. Households would be randomly sampled from a list of all households in a cluster with more than 1 acre of land, determined by a listing exercise. This sample needs to be further inflated to cover attrition in the panel between the baseline and end line (assumed at 10%) and to account for some households not being in the area of common support with the control areas during the PSM exercise (assumed at 33%). This would give a required sample of 47 per cluster.

In addition to this, a secondary sample of 12 households per cluster will be taken – a random sample of households with less than 1 acre of land. This will be used to calculate spill overs when compared with similar households in the control groups, with a Minimum Detectable Effect of 17 percentage points.

In clusters (GPs) of more than four revenue villages, the sample will be selected from four randomly sampled villages within the cluster, rather than all villages. This is to limit the scope of the listing exercise and control costs. In this scenario, 12 households with more than one acre will be sample per village (total 48 per cluster) and 3 with less than one acre per village (total 12 per cluster).

To mitigate the risks of the assumptions being optimistic, the number of clusters sampled in the treatment arm will be increased by a third (to 41 clusters) which will give the ability to drop entire clusters if there is no implementation that occurs.

This does not need to be repeated in the internal control areas; although during stratified random sampling of clusters at the block level (to ensure broad representation of the fourteen evaluation treatment blocks), rounding meant that 31 clusters were selected as internal controls rather than the minimum 28 needed for the evaluation.

In summary, in the fourteen evaluation blocks, 41 clusters (GPs) have been selected through stratified random sampling as treatment clusters. 48 households per cluster with more than one acre of land will be randomly selected (divided between up to 4 villages per cluster). From the total sample of 1,968, it is expected that 615 households will end up receiving the intervention.

In the fourteen evaluation blocks, 31 clusters (GPs) have been selected through stratified random sampling as control clusters. 48 households per cluster with more than one acre of land will be randomly sampled (divided between up to 4 villages per cluster). From the total sample

of 1,488, it is expected that 465 will be matched to the households in the treatment areas that end up receiving the intervention.

This will give a Minimum Detectable Effect for the ATT estimates of better than 15 percentage points.

In addition, 12 households per cluster with less than one acre of land will be randomly selected from all clusters and used as the basis to calculate spill over effects. This will have a Minimum Detectable Effect of better than 17 percentage points.

Table 3: List of assigned treatment and control clusters

District	Block	Gram Panchayat	Random Assignment
Bokaro	Chandankiyari	Bastora	Control
Bokaro	Chandankiyari	Chandra	Control
Bokaro	Chandankiyari	Mahal East	Control
Bokaro	Chandankiyari	Kherabera	Treatment
Bokaro	Chandankiyari	Kusumkiyari	Treatment
Bokaro	Chandankiyari	Laghla	Treatment
Bokaro	Chandankiyari	Lanka	Treatment
Bokaro	Chandankiyari	Simuliya	Treatment
Dhanbad	Purbi Tundi	Ukma	Control
Dhanbad	Purbi Tundi	Chururiya	Treatment
Dhanbad	Purbi Tundi	Pandrabajera	Treatment
East Singhbum	Ghatshila	Bankati	Control
East Singhbum	Ghatshila	Gopalpur	Control
East Singhbum	Ghatshila	Asna	Treatment
East Singhbum	Ghatshila	Banki	Treatment
East Singhbum	Ghatshila	Barakhursi	Treatment
East Singhbum	Patamda	Bidrra	Control
East Singhbum	Patamda	Kamalpur	Control
East Singhbum	Patamda	Kumir	Treatment
East Singhbum	Patamda	Lacchipur	Treatment
East Singhbum	Potka	Asanbani	Control
East Singhbum	Potka	Kalikapur	Control
East Singhbum	Potka	Sangram	Control
East Singhbum	Potka	Chakri	Treatment
East Singhbum	Potka	Hensda	Treatment
East Singhbum	Potka	Kuldiha	Treatment
East Singhbum	Potka	Matku	Treatment
Gumla	Sisai	Rerwa	Control
Gumla	Sisai	Shivnathpur	Control
Gumla	Sisai	Bargaon	Treatment
Gumla	Sisai	Larango	Treatment
Khunti	Khunti	Fudi	Control
Khunti	Khunti	Bhandra	Treatment
Khunti	Khunti	Siladon	Treatment
Lohardaga	Bhandra	Udrangi	Control
Lohardaga	Bhandra	Baragain	Treatment
Ramgarh	Mandu	Barughutu North	Control
Ramgarh	Mandu	Barughutu West	Control

Ramgarh	Mandu	Laiyo South	Control
Ramgarh	Mandu	Barughutu Middle	Treatment
Ramgarh	Mandu	Ichakdih	Treatment
Ramgarh	Mandu	Karma South	Treatment
Ramgarh	Mandu	Kuju East	Treatment
Ramgarh	Mandu	Kuju West	Treatment
Ramgarh	Patratu	C.C.L. Saunda	Control
Ramgarh	Patratu	Katiya Panchmandir	Control
Ramgarh	Patratu	Lapanga	Control
Ramgarh	Patratu	Palu	Control
Ramgarh	Patratu	Budh Bazar Chief House	Treatment
Ramgarh	Patratu	Dewariya Basti	Treatment
Ramgarh	Patratu	Dudgi	Treatment
Ramgarh	Patratu	Shah Colony	Treatment
Ramgarh	Patratu	Sundar Nagar	Treatment
Ranchi	Angara	Angara	Control
Ranchi	Angara	Barwadag	Control
Ranchi	Angara	Bongaibera	Treatment
Ranchi	Angara	Childag	Treatment
Ranchi	Bero	Doranda	Control
Ranchi	Bero	Kurgi	Control
Ranchi	Bero	Ghaghra	Treatment
Ranchi	Bero	Ita	Treatment
Ranchi	Chanho	Roll	Control
Ranchi	Chanho	Silagain	Control
Ranchi	Chanho	Murto	Treatment
Ranchi	Chanho	Patratu	Treatment
Ranchi	Kanke	Rarha	Control
Ranchi	Kanke	Sukurhutu (North)	Control
Ranchi	Kanke	Urugutu	Control
Ranchi	Kanke	Kanke (South)	Treatment
Ranchi	Kanke	Katamkuli	Treatment
Ranchi	Kanke	Mesra (West)	Treatment
Ranchi	Kanke	Neori	Treatment

EVALUATION MODEL 2: "EXTERNAL" CONTROLS

Design and limitations

This quasi-experimental evaluation technique will use "external" controls, whereby the fourteen evaluation blocks will be matched with fourteen blocks outside of the JOHAR intervention area, which will act as a counterfactual.

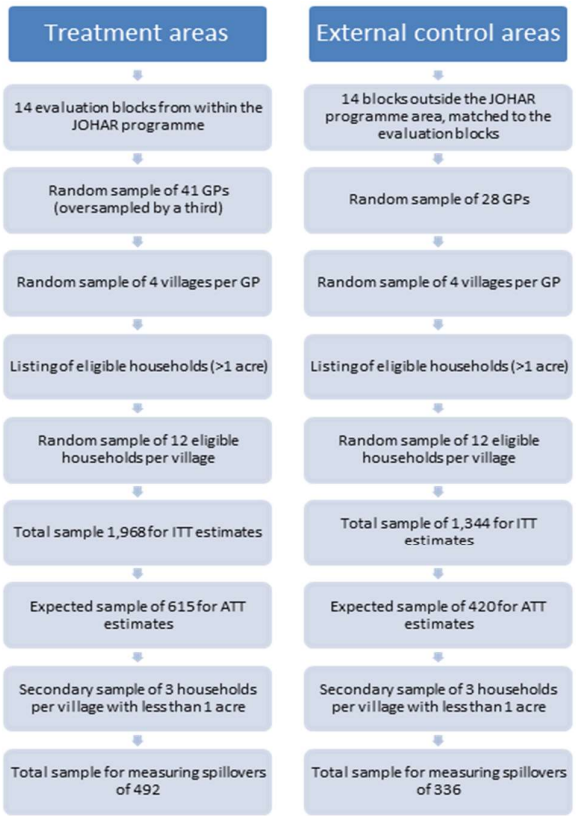

Figure 2: Design of evaluation Model 2

The external controls approach is less robust than the internal controls approach that deployed cluster randomisation as matching is not a perfect substitute for random assignment; there will always be differences between treatment and control groups that undermine the validity of the counterfactual. It also relies on assumptions about parallel trends (that changes observed over time in the control areas are representative of what would have been observed in the treatment areas had treatment not been observed). This assumption cannot be tested and remains a limitation.

Furthermore, the evaluation method will not be valid if implementation is scaled up outside the JOHAR intervention area or if other interventions affecting income are implemented in the control areas but not the treatment areas. For example, other JSLPS initiatives such Sanjivani and Initiative for Horticulture Intervention by Micro Drip Irrigation supported by Japan International Cooperation Agency (JICA) have elements that overlap with JOHAR.

External validity is also compromised by the fact that the treatment blocks have been purposively selected by the programme. This remains an evaluation limitation.

Sampling

The same sampling calculations for the internal control, cluster randomised model is valid for the external controls model, with the same Minimum Detectable Effect sizes.

In summary, in the fourteen evaluation blocks, 41 clusters (GPs) have been selected through stratified random sampling as treatment clusters. 48 households per cluster with more than one acre of land will be randomly selected (divided between up to 4 villages per cluster). From the total sample of 1,968, it is expected that 615 households will end up receiving the intervention.

In fourteen matched control blocks, 28 clusters (GPs) have been selected through stratified random sampling as control clusters. 48 households per cluster with more than one acre of land will be randomly sampled (divided between up to 4 villages per cluster). From the total sample

of 1,344, it is expected that 420 will be matched to the households in the treatment areas that end up receiving the intervention. This will give a Minimum Detectable Effect for the ATT estimates of better than 15 percentage points for primary outcome indicators.
In addition, 12 households per cluster with less than one acre of land will be randomly selected from all clusters and used as the basis to calculate spill over effects. This will have a Minimum Detectable Effect size of 17 percentage points.

Table 4: Randomly selected clusters (Gram Panchayats) in matched control blocks

District	Block	Gram Panchayat
Gumla	Bharno	Dumbo
Ramgarh	Chitarpur	Marangmarcha
Hazaribagh	Dadi	Hesalong
Hazaribagh	Dadi	Kanki
Gumla	Dumri	Akasi
Giridih	Dumri	Atki
Giridih	Dumri	Balutunda
Giridih	Dumri	Bharkhar
Giridih	Dumri	Jamtara
Bokaro	Gumia	Barki Punu
Bokaro	Gumia	Lodhi
Bokaro	Gumia	Pachmo
Bokaro	Gumia	Tikahara
Ranchi	Itki	Ranikhatanga
West Singhbhum	Jagannathpur	Badananda
West Singhbhum	Jagannathpur	Maluka
Ranchi	Namkum	Bandhuwa
Ranchi	Namkum	Mahilong
Bokaro	Nawadih	Birni
Bokaro	Nawadih	Dahiyari
West Singhbhum	Noamundi	Mahudi
West Singhbhum	Noamundi	Pataita
Simdega	Pakar Tanr	Krushkela
Deoghar	Palojori	Bagdaha
Deoghar	Palojori	Birajpur
Deoghar	Palojori	Mahuadabar
Simdega	Thethaitangar	Bombalkera
Simdega	Thethaitangar	Koromiyan

BLOCK LIST FOR LIVESTOCK COMPONENT OF ANALYTICAL STUDY

#	District	Block
1	DUMKA	Masalia
2	LATEHAR	Barwadih
3	LATEHAR	Manika
4	PAKUR	Pakaur
5	PAKUR	Pakuria
6	PALAMU	Chainpur
7	PALAMU	Chhatarpur
8	PALAMU	Patan
9	SIMDEGA	Kurdeg
10	WEST SINGHBHUM	Jhinkpani

ANNEXURE 2

Draft Terms of Reference (ToR) for the hiring of Consultancy Services for "Endline Evaluation Survey" under JOHAR project

1. **BACKGROUND:**

Jharkhand State Livelihood Promotion Society (JSLPS) is an autonomous society constituted in the year 2009 under the aegis of Department of Rural Development, Government of Jharkhand. The society is created to serve as a special purpose vehicle for smooth implementation of poverty alleviation schemes and programmes in the state. The society has its own Governing Body, chaired by the Hon'ble Minister of Rural Development Department, Government of Jharkhand and Executive Committee, chaired by the Principal Secretary / Secretary of Rural Development Department, Government of Jharkhand. Currently, the society is implementing multiple poverty alleviation programs supported by Govt. of India, state's own fund and funds from other agencies. The major programs implemented by JSLPS are – National Rural Livelihood Mission (NRLM), MKSP, Initiative for Horticulture Intervention by Micro Drip Irrigation supported by Japan International Cooperation Agency (JICA), and the Jharkhand Opportunities for Harnessing Rural Growth (JOHAR) project. The core strength of the society lies in its team of professionals and thematic experts deployed at State, District, Block and cluster level who have strived to build up strong and vibrant community institutions at village level.

2. **JOHAR PROJECT:**

Govt. of Jharkhand with financial assistance from the World Bank is implementing the JOHAR project across 68 blocks of 17 districts, which is a livelihoods programme being layered on the existing community base of SHGs supported by JSLPS, through the NRLM project. The JOHAR project aims to bring transformative change in the lives of the targeted families. The project development objective is to enhance and diversify household income (real) in select farm and non-farm sectors for target beneficiaries (about 200,000 unique households) in project areas.

The key areas of interventions under JOHAR are: a) High Value Agriculture (HVA) development b) Irrigation system development c) Livestock development c) Fishery development d) Non-Timber Forest Produce (NTFP) development e) Skills, jobs, and enterprise development f) Promotion of pro-poor agricultural finance systems, and g) Promotion of market access and private player participation. Adopting a value chain approach, JOHAR intends to promote rural producer collectives that will include producer groups and larger producer organizations. This six-year project has commenced in September 2017 with an approximate budget outlay of Rs. 928 Crore. However, the project is designed to leverage significant additional funding from the existing schemes of allied departments through convergence.

JSLPS will manage and be responsible for implementation and outcomes of the JOHAR project, and for this purpose, the society has deployed a committed team of professionals at all levels, and established a JOHAR specific State Project Management Unit (SPMU), at the state level. The project also draws on the strength of the existing government departments and schemes, and the SPMU leverages the expertise and capacity of senior government officials from allied departments. Among the NRLM intensive blocks, JOHAR has identified clusters wherein it will target around two lakh households. Further, the JOHAR project is underpinned by a solid monitoring, learning, and evaluation system, which feeds into the decision-making systems at JSLPS. A technical agency named Oxford Policy Management Limited (OPML) was hired to provide technical Monitoring and

Evaluation (M&E) services for the JOHAR project and was responsible for designing the impact evaluation for JOHAR with input and review by JSLPS and World Bank team for JOHAR.

3. **RATIONALE FOR ENDLINE EVALUATION SURVEY:**

The main objective of JOHAR is "Enhanced and diversified household income in select farm and non-farm sectors for targeted beneficiaries in the project area." To measure the objective following key indicators have been identified:

(a) Percentage increase in the real average annual household income of the targeted households in the project area.
(b) Percentage increase in proportion of real income from select livelihood sources
(c) Number of project beneficiaries that are Scheduled Caste or Scheduled Tribe
    a. Percentage of female beneficiaries
(d) Number of farmers reached with agricultural assets or services
    a. Number of female farmers

A rigorous quantitative impact evaluation has been designed and a baseline survey was carried out in 2018 to estimate the precise impact of the JOHAR project interventions. The JOHAR impact evaluation was designed[11] and baseline survey[12] was carried out to only include the High Value Agriculture (HVA) sub-component of the JOHAR project. Therefore, along with the endline evaluation, a thematic evaluation[13] needs to be conducted to capture progress and impact in other value chains as well, specifically livestock. The current assignment is specific and restricted to conducting the survey fieldwork for the above mentioned endline evaluation, including thematic evaluation under quantitative impact evaluation for the JOHAR project. Impact evaluation design is attached at **Annexure-1**, in which the names of sampled Gram Panchayats and their random assignment have been removed and will be shared with the selected agency prior to survey fieldwork beginning.

4. OBJECTIVES OF ASSIGNMENT:

JSLPS seeks to identify a survey agency or a consortium of organizations (hereinafter referred to as agency) to programme the survey instruments, pre-test and refine the survey instruments, collect, in an efficient and reliable manner, quantitative data at the household and village level, and finally clean the data for the JOHAR project's thematic and endline evaluation. The survey tools developed for the quantitative data collection will capture data on the pathways to impact, intermediate indicators identified for the project, as well as the indicators that measure impact in terms of the overall JOHAR project development objective.

5. SCOPE OF WORK:

The survey will be carried out in 127 Gram Panchayats (GPs)[14] across about 36 blocks[15] of Jharkhand and sample 7,300 households[16]. This sample includes

[11] Designed by OPML

[12] Carried out by Kantar Public

[13] 5,874 households across 89 Gram Panchayats were covered in the JOHAR baseline survey, and 420 households across 28 Gram Panchayats were covered in an analytical study, additional 1,000 households, to mitigate the contamination happen in internal control group making it total of 7300 households. This group of 420 households across 28 Gram Panchayats will form the sample for the thematic evaluation to study the livestock sub-component along with the overall sample of 5,874 households that form the sample for the impact evaluation.

[14]This includes 89 GPs that were visited at baseline, 28 GPs that were visited in livestock programme areas for the analytical study, and 10 GPs for mitigating contamination of internal control group

households that were covered during the project's baseline survey (5,874), households covered during an analytical study (420) conducted post mid-term, and households (1,000) for an enhanced sample to mitigate the contamination happened in the internal control group. The households covered during the baseline survey are lesser than the sample size stated in the impact evaluation design document, since some sampled clusters were dropped due to operational reasons, resulting in the proposed sample of 6,000 being reduced to 5,874 at baseline. Out of total 28 internal control GPs about 10 GPs got contaminated during the phasing of project implementation. To mitigate this contamination an additional 10 non treated GPs will be taken from internal treatment blocks and an additional 1000 households will be selected through matching and surveyed. In addition to the impact evaluation design in annexure 1, the list of districts and blocks that form the additional control group for the impact evaluation (quasi-experimental design) are provided in annexure 2, and a list of districts and blocks covered for the livestock component of the analytical study are provided in annexure 3. The survey agency will be required to programme, pre-test, and refine survey instruments, conduct house listing and mapping exercise in selected additional 10 GPs for selection of 1000 sample HHs, prepare for and conduct quantitative data collection, including verification and checks to ensure data quality and integrity, as per the sample indicated, to provide and submit an analysis plan, raw data collected in desired format, and submit a cleaned dataset also in desired format. Preparation for data collection will include survey tool refinement and translation, development of CAPI tool, field team recruitment, house listing and mapping in 10Gps, survey tool field testing, and field team training. In addition to this the scope of work includes fielding the survey, quality assurance and quality control, and cleaning data. An advisory committee may be constituted by JSLPS to oversee and ensure quality of the assignment.

6. DETAILS OF TASKS TO BE CARRIED OUT:

The general responsibility of the survey agency will be to conduct the survey for the quantitative endline evaluation, including the thematic evaluation as evaluation design. The agency will work in close collaboration with the JSLPS and Oxford Policy Management Limited (OPML) teams in the field testing and refinement of survey tools, CAPI development and data management, survey field team training, fielding the survey, supervision of all phases of data collection for the quantitative baseline survey, and cleaning of the data set. The data collection will be conducted with the use of technology platforms such as hand-held electronic devices for data capture and real-time data transfer and digital servers for data storage (popularly called computer-assisted personal interviewing, or CAPI).

The agency will be expected to propose an in-house Software Development and Data Management team for programming and data management. The questionnaires for the survey will need to be programmed in a software which is compatible for installation and use in hand-held electronic devices, such as tablets. The agency will be responsible for software development for data collection, from paper-based survey tools provided to them by JSLPS. The completed surveys will have to be uploaded on to a back-end server. The agency must also possess capacity and experience of handling the required server. Real-time access to data being uploaded on the servers will be provided to JSLPS. The agency will be responsible for the following aspects of the surv**ey.**

[15] This includes 26 blocks that were visited at baseline, 10 blocks that were visited in livestock programme areas for the analytical study, and 14 blocks for the thematic evaluation's enhanced sample

[16] This includes 5,874 households that were visited at baseline, 420 households that were visited for the analyticalstudy, and 1,206 households for the thematic evaluation's enhanced sample

7. REFINE, TRANSLATE, PRE-TEST, PROGRAMME, PILOT, AND FINALISE SURVEY INSTRUMENTS:

The agency will be provided with pre-final versions of the survey tools in English and Hindi, and would be required to refine and finalise the necessary tools (Hindi and English) required for the survey in close collaboration with JSLPS, as necessary this will require field testing as well.

Preparation of computer-assisted version of the questionnaires to enable CAPI. The agency shall be responsible for development of CAPI programme for the survey. A commonly used software[17] and platform should be used, such as SurveyCTO, CS-Pro, Survey Solutions, Blaise, or SurveyBe.

With translated survey instruments and CAPI software uploaded into the hand-held devices, the agency will pilot draft survey tools with at least 30 households and related surveys at other levels (such as Village survey questionnaire) in 6 villages of 3 blocks in at least two districts. The pilot survey will be conducted in two rounds and specific locations for the pilot survey will be provided by the M&E team of JSLPS. The pilot survey will also test the equipment to be used in the survey, the data management and transfer methods, and field supervision arrangements.

After field testing, the agency will debrief the field team, examine the data sets, and make any proposals for changes. After discussion with the JSLPS team, final versions of the questionnaires will be prepared and translated as needed and finally the data collection software updated accordingly. JSLPS team will provide final approval prior to roll-out and training[18] beginning. The survey modules will need to include GPS and time stamps as decided by the JSLPS team. The evaluation agency will be required to develop, and change as required and requested, a back check module as well. All survey instruments, including the back check instrument must be approved by JSLPS prior to beginning field team training and fieldwork.

8. DEPLOYMENT OF FIELD TEAM AND TRAINING:

A suitable field team must be deployed with necessary buffer, experience in the region, conducting agriculture, rural livelihoods, and living standards measurement surveys. Knowledge and awareness of local context and customs is necessary, which will need to be covered in the training as well. JSLPS may ask the evaluation agency to replace field team members who are found to be inadequate in carrying out this fieldwork or meeting eligibility requirements. The evaluation agency will require to prepare sufficient and necessary training material, a field manual, and plan for adequate training including field session up to 10 days, which will include 10 people deployed by JSLPS. The evaluation agency will be necessarily required to conduct a structured debriefing at Ranchi or another location, agreed to with JSLPS, on completion of the first 5 to 7 days of fieldwork after training has been satisfactorily completed.

9. DATA COLLECTION FIELDWORK:

JSLPS will provide the evaluation agency with the sample list prior to training, and the field team will be responsible for providing detailed field plans to conduct the fieldwork which includes house listing in additional 10 GPs, finding the correct households as per the sample list, conducting the survey[19] as per protocols, and uploading surveys with fieldwork conducted in adherence to a field plan shared and agreed to with JSLPS in advance. Fieldwork must be carried out using CAPI on

[17] JSLPS may not agree to or allow the agency to conduct the survey in a proprietary software

[18] A final round of changes may be made in consultation with JSLPS during training period as well

[19] Conducting the surveys includes administering household surveys which are estimated to last 3 to 3.5 hours each and village surveys (one per village sampled) which is estimated to last 0.5 hours each.

devices supplied by the evaluation agency for its field team, including adequate buffer and 10 devices must be made available to a team deployed by JSLPS.

10. DATA CLEANING

The agency will clean the data collected through the survey to resolve duplicates, outliers, errors, discrepancies, and inconsistencies. On completion of cleaning the data, JSLPS will accept and approve the raw dataset, clean dataset, data from back checks and error or variance reports[20].

11. STAFFING REQUIREMENT:

The evaluation agency must deploy a suitable team to undertake this assignment, which includes a core team and a field team.

I. Key Experts

SL. No.	Position	Qualification & Experience	Key responsibility	Time input (Man-days)
01	**TECHNICAL LEAD-01**	The technical lead must have a post-graduate degree, preferably a doctoral degree, in economics, public policy, agriculture, statistics, rural development from a recognized university. A degree in economics or statistics is preferred. S/he must have more than twelve years of experience relevant to this assignment, have been part of the core team of at least 3 impact evaluations which use data from a household survey of more than 3,000 households. Further, s/he must be adept in evaluation design, statistical methods, quantitative analysis, report writing, and be fluent in both English and Hindi		24
02	**PROJECT MANAGER-01**	The project manager must have a post graduate degree in social sciences, public policy, development studies, agriculture, or related discipline from a recognised university. S/he must have more than 8 years of relevant experience, of which more than 5 years should be in surveys and impact evaluations or field-based research studies, and s/he should have been part of the core team of at least 1 impact evaluation which used data from a household survey of more than 3,000 households. Further, s/he must be adept in project management, client engagement, team management, be		48

[20] The agency will be required to submit weekly error and variance reports based on quality control protocols carried out, and include reports based on back checks carried out by the agency as well as by a team deployed by JSLPS.

		familiar with research and evaluations, and be fluent in both English and Hindi.		
03	**DATA ANALYST-01**	The data analyst must have a post graduate degree in economics, statistics, public policy, agriculture, rural development, or related social sciences from a recognized university. A degree in economics or statistics is desirable. S/he must have more than 3 years of relevant experience, which includes managing large data sets, supervising surveys, and fieldwork. Further, they must be adept in statistical methods, quantitative analysis, report writing, be advanced users of a common statistical package such as STATA, R, or SPSS, and be fluent in English and Hindi		32
04	**PROGRAMMER AND DATA MANAGER-01**	The programmer and data manager must have a degree in computer science, computer applications, or a discipline related to information technology and social sciences. A post graduate degree is preferred. S/he must have more than 5 years of relevant experience which includes designing CAPI surveys, managing large scale survey data set and field-based research studies. Further, s/he must be adept at programming, be advanced users of common CAPI platforms, and be fluent in English and Hindi.		28
05	**TRAINING MANAGER-01**	The training manager must have a post graduate degree in social sciences with more than 5 years of relevant survey training experience which includes surveys and field-based research studies including significant experience in agriculture, rural livelihoods, and living standards measurement surveys. Further, s/he must have trained and managed field teams of at least 50 people in at least 3 surveys or studies that use data from surveys of more than 3,000 households. Experience in Jharkhand is preferred		24
06	**FIELD MANAGER-01**	The field manager must have a degree in social sciences with more than 5 years of relevant experience which includes large scale surveys and field-based research studies including significant experience in agriculture, rural livelihoods, and living standards measurement surveys. Further, s/he		80

		must have managed field teams of at least 50 people in at least 3 surveys or studies that use data from surveys of more than 3,000 households. Experience in Jharkhand is preferred.		
Non-Key Experts				
01	**FIELD COORDINAT-02**	All field team members must have a degree at minimum with more than 2 years of experience and having completed at minimum 2 rural household surveys. A post graduate degree is preferred for coordinators. Further, all field team members must be adept at using CAPI devices, available for the entire duration of the fieldwork, have attended the training fully, and be fluent in Hindi and at least one other language spoken in Jharkhand. Balance of male and female should be maintained among enumerator. Experience and local teams of Jharkhand is preferred.		148
02	**FIELD SUPERVISO-18**	Same as above.		1,216
03	**ENUMERATOR -72**	Same as stated above.		4,866
04	**BACK CHECKER-08**	Same as stated above.		592

12. EQUIPMENT AND LOGISTICS:

The evaluation agency will provide and make available the required number of good working condition hand-held devices and other tools necessary for data collection using CAPI to all field team members and a team of 10 persons deployed by JSLPS. All devices must have access to all survey instruments, with devices and tools provided to the JSLPS team having access to the back check modules as well. It will be the agency's responsibility to ensure any repair, maintenance, and replacement of devices that are not functioning as required, to ensure smooth operations during the fieldwork phase. The hand-held CAPI devices should have no physical or internal damage and have the following minimum specifications:

(i) Android version 8.0
(ii) Seven inches diagonal screen size
(iii) 2 Giga Bytes of Random Access Memory
(iv) 16 Giga Bytes of Read Only Memory
(v) 4,000 mAh battery

In addition to hand-held devices as mentioned above, each survey team must have access to and carry power banks, field manuals, authorisation letters

(provided by JSLPS), identity cards, mobile phones with contract numbers available to JSLPS, village and household lists, wifi or hot spot devices, surge protectors, adapters and chargers, notebooks, and pens or pencils.

13. QUALITY CONTROL:

The agency will be responsible for monitoring to ensure that the field survey is of high quality, yielding accurate and verifiable data and conducted in accordance with the field plan approved by JSLPS. These quality controls and monitoring activities include:

a) **BY TEAM OF SUPERVISORS IN EVERY SAMPLED LOCATION:**

(i) Confirming that the locations of field work are in accordance with the field plan approved by JSLPS
(ii) Confirming that the field protocols provided by JSLPS are implemented
(iii) Conducting spot checks (visual observation) of at least one interview of each enumerator on each and any given day
(iv) Conducting timely and random quality checks in the field to ensure proper administration of the survey and data collection
(v) Re-visits to a randomly selected sample of at least 10 percent of the households visited by each enumerator, to double-check the data recorded in key variables

b) **BY TEAM OF BACK CHECKERS IN EVERY SAMPLED LOCATION:**

(i) Deployment in field to confirm the veracity and quality of data collected. A back-checker will require to visit each village, after completion of data collection and CAPI questionnaires are provided, to verify the data collected and ensure that interviews were conducted as per field protocols
(ii) Field some modules of the questionnaires and match responses to check for fraudulent or erroneous data for 10% of the sample.

c) **BY DATA MANAGEMENT TEAM:**

Back-end data scrutiny of all uploaded questionnaires to ensure that all information recorded is clear and consistent and, where deemed necessary, to clarify with respondents any inconsistencies in their answers with that of the enumerator.

JSLPS may deploy its own team, of 10 personnel, for quality control in the field through the duration of the baseline survey, and at any point request the Agency to show a log of data checks performed, errors rectified and demonstrate back-end data checks.

The Agency will share, with JSLPS weekly, the data collected by their team of back checkers, as well as back checkers deputed by JSLPS. Errors of more than 5% in the data collected will invite a penalty of 5% of the total payment on the Agency.

The agency will report any field errors that they may notice and (a) provide feedback on the instruments to JSLPS and (b) trouble shoot any data system errors that may occur during data collection.

14. DATA MANAGEMENT AND SECURITY:

The agency will be responsible for developing a data entry programme and carrying out consistency checks and provide raw data as well as the final cleaned dataset to JSLPS. The agency will provide access to internet or other platforms through which data can be transferred from hand-held devices to the server. The final cleaned dataset will be provided in STATA and ASCII formats. The agency is required to provide copies of the datasets and data entry error reports/logs that show the frequency of discrepancies noted and actions taken to rectify to JSLPS. The agency will scrutinize all errors and inconsistencies detected during data entry and consistency programs by revisiting households if major errors are detected. Should

the JSLPS team notice more than 5% errors in data entry, the agency must be prepared to make corrections.

Further, the Agency will provide module with link to FTP site for back up to JSLPS server, in addition to maintaining its own back up, and will submit daily off-line as well.

The JSLPS team will verify a 5% random sample of households against the data entered through checks. In cases of errors found, there will be penalties deducted from the final tranche payment in accordance with the severity of errors. JSLPS has the right to cancel the contract and make no further payments or request the work to be done again (including the field work) without any additional costs.

The agency will provide the raw data and final clean copies of the datasets along with a complete codebook to JSLPS within one week of completion of field work. JSLPS retains the right to the complete data set, with complete access to all names, addresses, survey data for individuals, households and others surveyed through this exercise.

15. DELIVERABLES AND TIMELINE OF KEY ACTIVITIES:

Table 5 below lists the activities that will be carried out by the evaluation agency throughout this assignment, with its corresponding deliverables and a timeline.

Table 5: Activities, deliverables, and timeline

#	Activity	Deliverable	Timeline
1	Deployment of manpower	Core team deployment	Week 1
2	Background work and inception phase	Inception report	Week 2
3	Refine, translate, pre-test, programme, and pilot survey instruments	Survey instruments	Week 4
4	Prepare for field team training	Training material, logistics, and plan	Week 5
5	Mobilise field team	Field team deployment	Week 5
6	Field team training	Field manual, training report, and fieldwork plan	Week 6
7	Data collection fieldwork	Weekly progress update and error/variance report	Week 7 to 17
8	Data collection fieldwork wrap up	Fieldwork report	Week 18
9	Data cleaning	Clean data	Week 20

16. INSTITUTIONAL ARRANGEMENTS:

The evaluation agency will work under the overall supervision of JSLPS which will provide the coordination mechanisms necessary for the agency to work effectively and as needed. Additionally, an advisory committee may be instituted by JSLPS to oversee and ensure quality of the assignment.

18. PAYMENT FOR SERVICES:

Table 6 below is the payment schedule for this assignment. Payment for services will be made in four tranches, as detailed below.

Table 6: Payment schedule

#	Amount (% of total contract price)	Deliverable	Timeline
1	Nil	Submission of inception report	Week - 2
2	30%	Deployment of core team and field team, submission and acceptance of final CAPI and PAPI version of survey instruments, training material, field manual, training report, and fieldwork plan.	Week - 9
3	40%	Submission and acceptance of weekly progress reports, error and variance reports, final fieldwork report and raw data.	Week- 20
4	30%	Submission and acceptance of clean data (with variable names), and a complete codebook.	Week- 24

19. DURATION OF THE ASSIGNMENT:

The total duration of this assignment is for a period of 9 months from the date of signing the contract. However, the contract may be extended based upon requirement of JSLPS and performance of the consultant.

20. OWNERSHIP AND FUTURE USE OF DATA:

The data collected in this assignment and any products resulting from this assignment are the express property of JSLPS and the JOHAR project. The agency may not use the data or any products resulting from this assignment as well as any derivatives from the data or products for its own research purposes, nor license the data to be used by others without the written consent of JSLPS.

21. MONITORING AND REPORTING ARRANGEMENTS:

The assignment will be monitored by a review committee constituted by JSLPS. The agency will report to the Project Coordinator – Monitoring & Evaluation of JOHAR for day-to-day operations and for periodical review. The PC- M&E shall also be responsible to oversee the progress against deliverables.

Annexure 3

Table 7: Results Framework and PDO indicators

#	PDOI / IRI	Source	EOP Target (Year 6)	Current status
PDOI1	Percent increase in average annual household income (real) of the targeted households.	Baseline/Midline /Endline	30%	NA
PDOI2	Percent increase in the proportion of income (real) from select livelihoods sources.	Baseline/Midline /Endline	30%	NA
PDOI3	Number of project beneficiaries that belong to SC/ST categories.	MIS	1,00,000	262296
PDOI4	Number of project beneficiaries that belong to SC/ST categories – female	MIS	70,000	262296
PDOI5	Farmers reached with agricultural assets or services	MIS	2,00,000	456675
PDOI6	Farmers reached with agricultural assets or services – female	MIS	1,40,000	454259
IRI7	Percent of Producer Groups that have been assessed as grade A and B	MIS	60%	63%
IRI8	Percent of project-supported Producer Organizations that are viable	MIS	50%	85%
IRI9	Clients who have adopted an improved agr. Technology promoted by the project	MIS	1,60,000	224215
IRI10	Clients who adopted an improved agr. Technology promoted by project – female	MIS	1,12,000	224215
IRI11	Area provided with irrigation or drainage services	MIS	5900 Hectare	5998 hectares
IRI12	Percent increase in average dietary diversity score in target households	Baseline/Midline/Endline	10%	18.3%
IRI13	Percent increase in the sale volume of select HVA crops of targeted households	MIS/HH survey	30%	2.1%
IRI14	Percent increase in the sale volume of select livestock produce	MIS/HH survey	30%	NA
1RI17	Proportion of total production sold by targeted households through producer collectives	MIS/HH Survey	20%	NA
IRI18.1	Propotion of POs that are linked with formal financial services	MIS	30%	60%
IRI18.2	Number of targeted JOHAR households accessing community finance for intensification of agriculture and allied activities	MIS/HH survey	40000	60090
IRI19	Number of service providers trained and earning at least Rs 2000 per month through user fees in the last 2 years	MIS	7,000	0
IRI20	Number of entrepreneurs trained	MIS	2,000	940
IRI21	Number of private sector partnerships operationalized	MIS	3	4

#	PDOI / IRI	Source	EOP Target (Year 6)	Current status
IRI22	Grievances registered related to delivery of project benefits addressed (%)	MIS/	100%	100%
IRI23	Proportion of project investments mobilized through convergence	MIS	20%	4.02%
IRI24	Project management has satisfactorily addressed statutory audit findings (cases) according to agreed business standards	MIS/Project correspondence	100%	100%

Annexure – 4

Details of Seven Process monitoring rounds

Round 1 Apr-Jun 2019	• 51 PGs, 12 blocks, 9 districts
Round 2 Jul-Sep 2019	• 116 PGs, 28 blocks, 13 districts
Round 3 Jan-Mar 2020	• 268 PGs, 41 blocks, 14 districts
Round 5 Jan-Mar 2021	• 285 PGs, 43 blocks, 15 districts
Round 6 Jul-Oct 2021	• 168 PGs, 36 blocks, 10 districts
Round 7 Jan-Mar 2022	

List of Nine Rapid/Quick Study:

- A cost-benefit analysis of a layer co-operative in Jharkhand
- Training Need assessment of AKMs and Senior AKMs
- An examination of crop planning, utilisation of funds and access to credit by members of the JOHAR
- A quick study on the sale of HVA produce through FPCs
- A study on the effectiveness of JOHAR's irrigation interventions
- Sales volume study for HVA and Livestock covering 1200 HH.
- Study on PNH utility and demand among PG members
- Study on awareness and adoption of Packages of Practices.
- Study on production cluster approach.