



# Project ANKA - G4-Viranşehir-5,7,8 Solar Power Plant Project, Şanlıurfa

*Memo regarding households surveys conducted in Duzik Hamlet*

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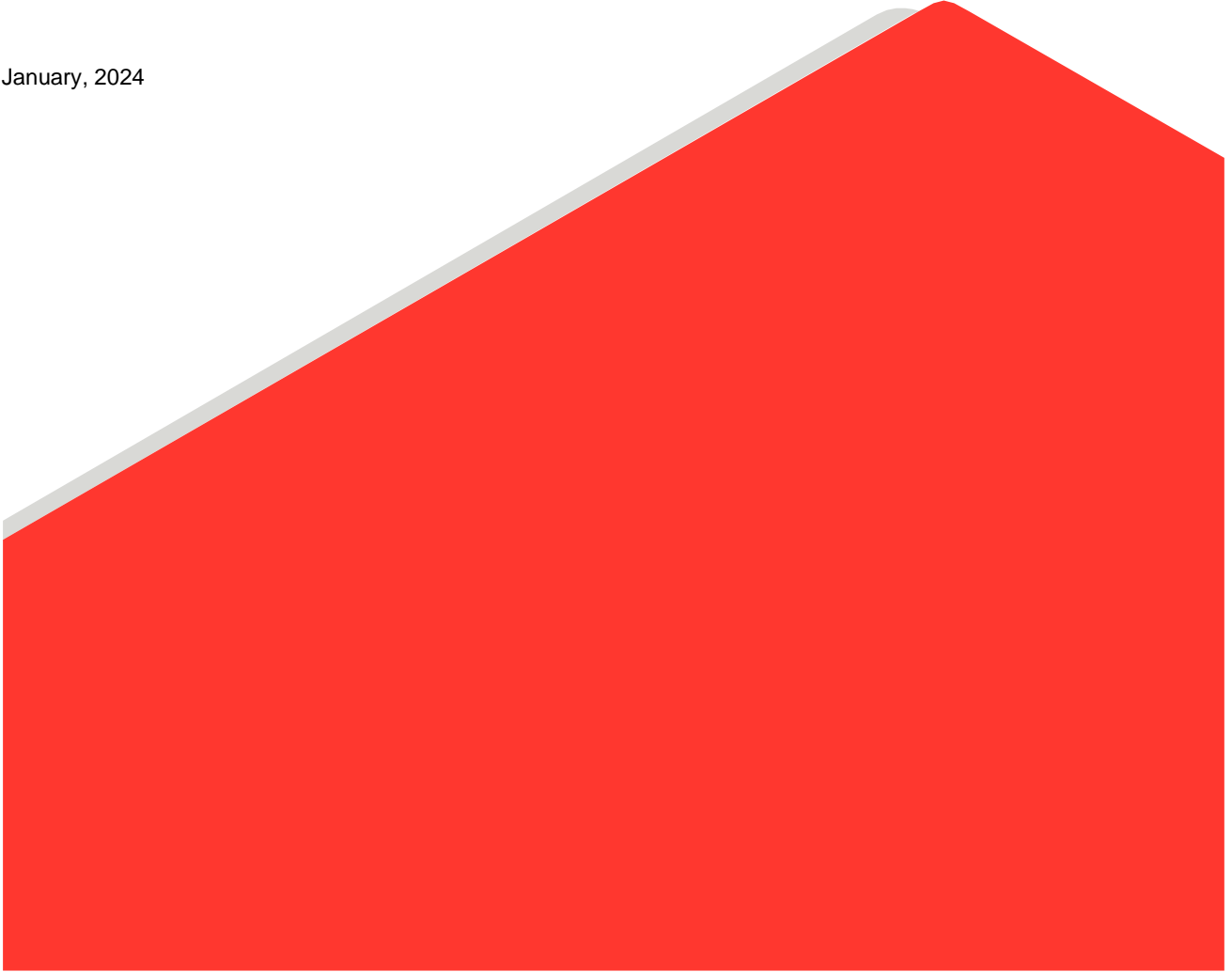
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## **1.0 MEMO REGARDING HOUSEHOLDS SURVEYS CONDUCTED BY ANKON IN DÜZİK HAMLET**

### **1.1 Introduction**

The Livelihood Restoration and Community Development Plan (LRCDP) for the Viranşehir Solar Power Plant (SPP) project represents a comprehensive and targeted initiative aimed at addressing the specific needs of the affected households in Düzik. Recognizing the limitations of the previous baseline and consultation exercises conducted as part of the Environmental and Social Impact Assessment (ESIA), which primarily relied on the perspectives of the Mukhtars, the studies conducted within the scope of the LRCDP build upon the previous studies for the ESIA. While household surveys were not feasible during the ESIA, community-level surveys were carried out with Mukhtars of the villages and information about all local communities and affected households was gathered. In addition, a baseline was developed by considering current data from relevant institutions such as the District Directorate of Agriculture. However, as part of the LRCDP studies, more comprehensive and targeted surveys were undertaken, specifically concentrating on the needs of the affected households. This plan allows for a more in-depth understanding of the unique circumstances and requirements of the affected households, marking a commitment to thorough engagement and ensuring that their voices play a central role in the planning and execution of development initiatives.

### **1.2 Project Description**

The G4-Viranşehir-5,7,8 Solar Power Plant Project, with a capacity of 195 MWp/150MWe, is planned by Kalyon Enerji Yatırımları A.Ş. and its subsidiary, Kalyon YEKA GES 3 ve 4 Güneş Enerjisi Yatırımları A.Ş. The Project, located in Şanlıurfa Province, Türkiye, was designated as a Renewable Energy Resource Area ("YEKA").

Comprising three sub-projects, G4-Viranşehir 5, 7, and 8, the pre-construction activities began in August 2023, including mobilization, site preparation, and early trenching. The estimated construction period is 10 months, with a 7-month test and commissioning phase, and a total operation period of 30 years.

The Project will be established on a pastureland of 270 hectares. Adıyaman-Şanlıurfa-Diyarbakır Planning Region 1/100.000 Scaled Environmental Master Plan Amendment (M44, N42 and N43 Plan Plots, Plan Amendment Explanation Report) was approved on 07.07.2020 in accordance with Article 102 of the Presidential Decree No. 1. This Environmental Master Plan is located within the borders of "Grassland-Pastureland" as land uses in the 1/100.000 scale N43 Plan. The Project areas are also classified as "Pastureland" in terms of title deed.

The closest settlements to the SPP site are Düzik Hamlet with a distance of 0.57 km, Demirli Village with a distance of .1.89 km, Subaşı Village with distance of 1.82 km, Gölcük Village with a distance of 2.73 km and Kadıköy Village with a distance of 5.16 km.

### **1.3 Identified Applicable Standards**

The international standards applicable for the project include Equator Principles IV (2020), IFC Performance Standards, OECD's Common Approaches, and Green Loan Principles.

These standards provide guidelines and best practices for the project and the LRCDP. Complying with these standards ensures responsible and ethical practices.

## 1.4 Project Landuse

The "G4-VIRANŞEHİR-8 (65 MWp/65MWm/50MWe-90 ha) SPP" on an area of 90 ha with a planned power of 65 MWp/65 MWm/50 MWe is planned to be built and operated by Kalyon Enerji Yatırımları A.Ş., located in Şanlıurfa Province, Viranşehir District, Kadıköy Neighbourhood, Block 0, Plot 17-18.

The required pastureland for the development of the Project consists approximately 8% of the total pastureland of Kadıköy village. The required pastureland for the development of the five projects consists approximately 24% of the total pastureland of Kadıköy village. The remaining pasture area of Kadıköy village (excluding the Project area, agricultural lands and private parcels), which will be used by Kadıköy village for grazing purposes, is 3058.19 ha.

According to the official information gathered from Viranşehir District Directorate of Agriculture and Forestry, the total number of sheep and goats in Kadıköy village is 10,179 and the number of households is 350. In Düzik Hamlet where Project is located, the pastureland is used for grazing purposes by 35 households. The number of sheep and goats grazing in this area is 2,800.

### Perceptions of Affected Households regarding Project Land Use

When asked about the impact of the project due to land use, 10 interviewees stated that the pasture area was restricted. Therefore, they stated that ovine breeding was negatively affected. Households stated that they would like to engage in cattle breeding as a solution to this situation. 4 interviewees stated that they did not experience any negativity due to the land use of the project.

## 1.5 Livelihood Restoration and Community Development Plan

The Livelihood Restoration and Community Development Plan for the Viranşehir SPP is designed to address the 35 affected households' needs and enhance their livelihoods. The program includes major and minor supports, aiming to promote sustainable development.

Major supports included in the plan are as follows:

- **Building Renovation:** Aid for house and barn improvements, providing preferred building materials based on household preferences.
- **Livestock Support:** Assistance for cattle breeding, offering crossbred Simmental calves or pregnant cows within budget limits.
- **Power Plant Area as Pasture:** Repurposing the solar plant area for valuable sheep pasture, with planned training for sustainable management.
- **Community-Based Support:** Consideration of projects like creating a pond and supporting schools, contingent on feasibility assessments, with inclusive support for renovations and educational materials.
- **Employment Opportunities:** Job creation at the solar plant site for security personnel, aiming for local household employment and sustainability.
- **Community-Based Investment:** Extra package includes a mosque and village house, content determined through ongoing discussions, promoting community-driven development.

Minor supports included in the plan are as follows:

- **Mentoring Support:** Individuals, particularly vulnerable ones, receive mentoring support for accessing public services and government assistance.

- **Youth Education Packages:** Vocational skill development opportunities are provided for young people, focusing on skills in demand in the market.
- **Adult Education Packages:** Training programs cover agricultural production, animal health, nutrition, and dairy product production and marketing, catering to the specific needs and demands of the community.
- **Veterinary Services:** Health checks, vaccination support, and information activities regarding animal diseases are provided in the village.
- **Feed Support for Small Livestock:** Sheep owners receive three months of hay support during the transition period.
- **Soil Analyses and Fertilizer Recommendations:** Plant nutrient analyses and fertilizer recommendations are offered to farmers upon request, promoting conscious fertilizer usage in plant production.

The eligibility criteria for the LRCDP include individuals utilizing pastureland for grazing, vulnerable individuals, and those indirectly affected by pasture loss, including households and communities. To qualify, individuals must have a registered residence and living space in the specified area; those residing in different cities or engaged in different occupations are deemed ineligible, even if their immediate relatives meet the criteria. Notably, improvements for public use areas of children and women as the priority group in the settlement, even if not directly impacted, fall within the eligible category. These criteria ensure that the LRCDP targets individuals and communities directly linked to the affected area, prioritizing those most impacted by pasture changes and promoting inclusive community development.

### 1.5.1 Field Study within the Scope of LRCDP

Kalyon Enerji contracted social consultancy services from ANKON to implement a social field study within the scope of the Livelihood Restoration and Community Development Plan (LRCDP) for the Viranşehir SPP. Two local experts, a Social Development Expert and a Senior Social Development Support consultant, were hired for this initiative. The senior expert, well-respected in the region, played a crucial role in mediating negotiations.

Between December 15-18, 2023, the team conducted detailed household interviews in the Düzik settlement, engaging with 35 households and holding separate focus interviews with youth and women groups. Meetings were also conducted with the Mukhtar of Kadıköy and the Viranşehir District Governor. The fieldwork study covered demographic data, income sources, the relationship with the Solar Power Plant, sensitive group inquiries, and the impact and perception of the SPP within households.

Based on the information received from Kalyon Enerji and Ankon, the overall impression was positive, with the work being well-received during home visits. Local staff collaboration expedited cooperation and reconciliation. Participants accepted the proposal for a household-based Livelihood Restoration Program (LRP). This approach received positive feedback from local authorities.

Ankon continue working on data processing and evaluation with the expectation that the LRCDP draft content to be available at the end of February 2024. The contents of household-based and community-based LRP packages will be established by Ankon, emphasizing criteria such as priorities, realism, inclusiveness, sustainability, and results of vulnerable group analysis.

## 1.6 Baseline Data from LRCDP Field Study

### 1.6.1 Population and Demography

The information on the demographic characteristics of 35 affected households is provided in this section.

The total population of project affected people is reported as 270 individuals (see Table 1), distributed across 35 households. Additionally, among this group, there are 15 individuals who are over 65 years of age.

**Table 1: Total Population and Number of Households**

Village	Settlement	Total Population	Number of Households	Number of Individuals over 65 Years of Age
Kadıköy	Düzik	270	35	15

### 1.6.2 Economy and Livelihoods

Information on the economic structure of the affected households is presented in this section.

#### *Economic activities*

In terms of primary income source, animal husbandry is prevalent among the households. Agricultural production serves as the secondary income source for these households. Specifically, 11 households are involved in agricultural production.

In the context of the field study, it was found that only one household member declared their status as retired. This suggests that the majority of individuals within the households are actively engaged in either animal husbandry or agricultural production for their primary and secondary sources of income (see Table 2).

**Table 2: Total Population and Number of Households**

Village	Settlement	Primary Income Source	Secondary Income Source	Third Income Source
Kadıköy	Düzik	Animal husbandry	Agricultural Production	Seasonal agricultural worker

#### *Animal Husbandry*

There are 2,800 ovine animals (sheep and goats) in the affected households, and these animals use the pasture area for grazing in addition to feeding at barns. 14 households engage in seasonal buying and selling. The total cattle count is 232, with 8 households not having cattle. 16 households do not own any poultry, and the total poultry is 563. Furthermore, while 8 households abstain from producing animal products like milk and cheese, all other households actively participate in milk and cheese production (see Table 3).

**Table 3: Total Number Animals of the Households**

Village	Settlement	Number of Cattle	Number of Sheep and Goats	Number of Poultry
Kadıköy	Düzik	232	2,800	563

They feed their animals with pasture and fodder. All households use the pasture during the season. 2 households stated that they do not have animal barns. All other households have barns. They also provided



detailed information about the condition of their animal barns. Women's roles in animal production are milking and cheese making, while men are engaged in grazing in the pasture.

### **Agricultural Production**

The Project has no impact on agricultural land. 11 households stated that they engaged in agricultural production. They cultivate barley, wheat and lentils (see Table 4).

**Table 4: Agricultural Land Ownership**

Village	Settlement	Household	Size of agricultural land used
Kadıköy	Düzik	#1	50 decare
		#2	26 decare
		#3	40 decare
		#4	14 decare
		#5	150 decare
		#6	10 decare
		#7	15 decare
		#8	20 decare (renting treasury land)
		#9	30 decare (renting treasury land)
		#10	42 decare
		#11	96 decare

### **1.6.3 Vulnerable Groups**

The number of individuals identified as vulnerable within the 35 affected households is presented in Table 5. The figures obtained from this study conducted for LRCDP represents the vulnerability status of the 35 affected households in the Düzik Hamlet.

As per the survey findings, there are 15 individuals requiring care distributed across 10 households due to chronic diseases or disabilities. Among these households, one is headed by a female who herself is coping with a chronic disease. She resides with her three daughters.

A total of 25 people in 21 households stated that they receive regular Social Assistance.

**Table 5: Vulnerable Individuals within the Affected Households in the Duzik Hamlet**

Status	In the Whole Village (Total Number of Individuals)	The number of households that contain the individual in question
Children of both sexes	179	30
Elderly men and women (+65 years old)	15	10
People living with disabilities	2	2
People suffering from debilitating illnesses	5	4

Status	In the Whole Village (Total Number of Individuals)	The number of households that contain the individual in question
Men and women with lower educational status	Almost all of them are in secondary school or below. + 65 The number of illiterates among women is 90%	Almost all of them are in secondary school or below. + 65 The number of illiterates among women is 90%
Household below the poverty line (1)	20	20
Number of individuals receiving social assistance (2)	25	21
6.2. The cultivated land is also less than 50 da (3)	30	30
Households with fewer than 100 sheep and goats.	5	5
Household with less than 10 of cattle (4)	20	20
The house is made of reinforced concrete (undamaged) and is larger than 150 m <sup>2</sup>	15	15
Common property land users (pastureland)	30	30

(1) The explanation in footnote 4 is considered valid for the poverty assessment. In addition, the presence of land to be cultivated, the presence of agricultural tools and machinery, the presence of animals and vehicles such as automobiles were also considered as criteria in the evaluation. As a result, multiple cross-analysis was applied to identify households living below the poverty line and each household was evaluated on its assets/workforce, and social benefits, also observation of experts.

(2) Child allowance in 9 households (the state provides support to poor families between 350 TRY (12 USD) and 650 TRY (23 USD), depending on the number of children); elderly care support in two households; Other households also receive old-age support. All households have a green card, which is health insurance for the poor.

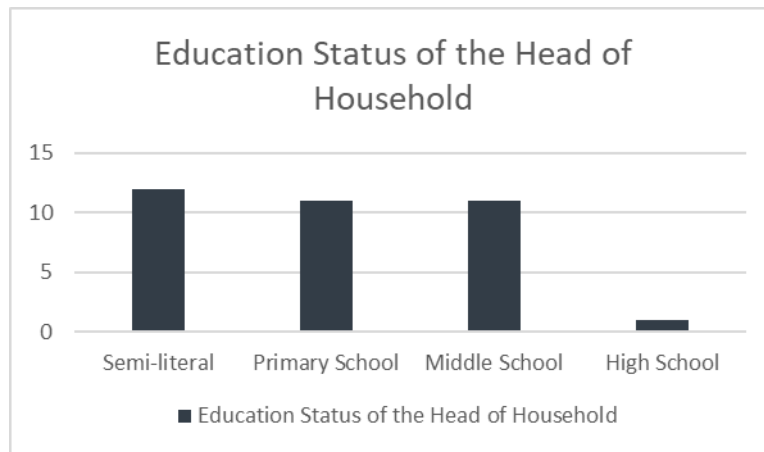
(3) If a person grows grain (barley) on 50 decares of land, he will get approximately 15 tons of yield. One sheep per year max. consumes 600 kg of feed; In this context, 50 decares of land meets the dry feed needs of at least 25-30 sheep, assuming that they will also use hay, this number is max. reaches 40. Therefore, 50 decares of land will make a significant contribution to the feed needs of a small family business. There is a problem for those who have a place below this. This data also shows that 30 households (the majority) in Düzik do not have the capacity to meet the feed needs for a small herd from their own land.

(4) The total number of cattle is 223 units, and these cattle are scattered among 24 households.

## 1.6.4 Education

### Education Levels

Education levels of the 35 households in the Düzik Hamlet is presented in Figure 1.



**Figure 1: Educational Levels of the Heads of the Households**

### 1.6.5 Infrastructure and Housing

The sizes of the residences range from 70 m<sup>2</sup> to 300 m<sup>2</sup>. The most common residence sizes are 150 m<sup>2</sup> and 100 m<sup>2</sup>, with 8 and 5 households, respectively. Other sizes, such as 200 m<sup>2</sup> and 120 m<sup>2</sup>, are also present in varying numbers. Of these houses, 27 are reinforced concrete and 8 are mudbrick. 6 of the interviewed households stated that their houses needed repair. The main fuel used for heating the houses is coal provided by the District Governorship and dung.

## 1.7 Conclusion

Based on the data received from Ankon, out of the interviewees, 6 individuals expressed no concerns with the project, while the remaining participants conveyed disturbances due to construction noise. Regarding the general perception of the households regarding the project, 12 interviewees expressed their support for the project. Other households expressed their support for the project on the condition of job opportunities and livelihood support. All households repeated their request for one person from each household to be employed.

As part of the LRCDP, all households have made specific requests. These include the desire for employment opportunities for at least one member of each household, support for cattle, the acquisition of building materials for home renovation, and the provision of materials for barn renovation. Additionally, there is a shared concern about the poor condition of village roads, with a collective request for improvement. Furthermore, households are seeking enhancements to the conditions of the mosque and school. They have also emphasized the need for drilling a borehole to enhance water capacity in the village and have expressed a collective desire for the construction of a small pond for animal watering in the remaining pasture, with the specific location to be determined by them.

These requests underscore the multifaceted nature of community needs addressed within the LRCDP, emphasizing both infrastructure improvements and livelihood support.

In the ESIA, it has been stated that a Livelihood Restoration and Community Development Plan will be prepared and implemented to bridge the gaps between the Turkish Expropriation Law and IFC PS-5. Also, the following mitigation measures have been determined to reduce the adverse impacts on pastureland-based livelihoods:

- Baseline Assessment for grazing capacity
- Collaboration with Expert Organizations for pasture management
- Grazing Assessment Report

- Grazing Procedure Development
- Government Collaboration for endorsement and support
- Shepherd Recruitment and Training in sustainable grazing practices
- Livestock Development
- Monitoring and Adaptive Management of grazing activities, updating strategies in collaboration with stakeholders.
- Construction Phase Mitigation (providing alternative feeding options, distributing animal feed seeds, and engaging in community awareness during construction)
- Community Engagement
- Documentation and Reporting
- Project Dissemination
- Project Evaluation (conducting a comprehensive evaluation of the project's impact on the ecosystem, grazing capacity, livestock development, and community livelihoods, incorporating results into the annual Environmental and Social Report)

Given the planned measures within LRCDP's scope and identified measures in the ESIA, LRCDP approach aligns with ESIA, especially in the approach to livelihood restoration support. The integration of the measures outlined in ESIA and LRCDP not only complements each other but also ensures effective collaboration, providing a comprehensive approach to addressing the project impacts on pastureland-based livelihoods.

## 1.8 Next Steps

Once the support packages are announced to households and agreed by them, implementation and monitoring will begin. LRP packages will be distributed to eligible households. The monitoring process in the studies is planned by Kalyon Enerji in four stages, integrated with each other:

**Table 6: Monitoring & Evaluation (ID) Program**

Monitoring Level	Type of Indicators for M&E Plan	Means	Frequency	KPIs
Process & Input Monitoring <i>(internal)</i>	<ul style="list-style-type: none"> <li>- TST staff dedicated to LRP implementation.</li> <li>- Capacity building &amp; training for staff</li> <li>- Availability of logistics and associated infrastructure</li> <li>Timely availability of budget</li> </ul>	<ul style="list-style-type: none"> <li>- Contracts related to purchases.</li> <li>- In-team training</li> <li>- In-team employment</li> <li>- Database update</li> <li>Grievance records</li> </ul>	-Monthly	Organization structure and sufficiency of resources
Output Monitoring <i>(internal)</i>	<ul style="list-style-type: none"> <li>- Number of people that are employed by the project (Viranşehir SPP)</li> <li>- Number of PAPs (households) that benefitted from LRP-related activities</li> <li>- Number of PAPs attended vocational training.</li> <li>- Number of PAPs attended capacity building training.</li> <li>- Number of cattle distributed under LRP</li> </ul>	<ul style="list-style-type: none"> <li>- Employment contract stating that you are employed</li> <li>- Records</li> <li>- Expert reports</li> <li>- Expense documents</li> </ul>	-Monthly	<ul style="list-style-type: none"> <li>- Number of disclosure meetings</li> <li>- Percentage of vulnerable PAP coverage</li> </ul>

Monitoring Level	Type of Indicators for M&E Plan	Means	Frequency	KPIs
	<ul style="list-style-type: none"> <li>- Amount of forage crops (straw) distributed under LRP</li> <li>- Number of houses renovated within the scope of LRP</li> <li>- Number of barns renovated within the scope of LRP</li> <li>- Number of vulnerable people who are benefitted from LRP</li> <li>- Number of animals benefiting from veterinary (animal health) services</li> <li>- Number of PAPs using soil analyzes and fertilizer use recommendations for crop production</li> <li>- Number of PAPs receiving mentoring support to access public supports and services</li> <li>- Number of PAPs (households) that found LRP packages suitable, reached consensus and signed an agreement</li> <li>- Number of households who signed agreements</li> </ul> <p>Number of households who refused to sign agreements/are still deciding</p>			
<p>Outcome Monitoring <i>(External)</i></p>	<ul style="list-style-type: none"> <li>- Assessment of LRP satisfaction with inputs &amp; content (qualitative analyses)</li> <li>- How do PAPs use the LRP supports they receive?</li> <li>- What were the effects of the packages on households?</li> </ul> <p>Periodic M&amp;E reports containing a list prepared internally and agreed with external evaluators and analysis and evaluations made by external evaluators.</p>	<p>Internally collected data is based on complementary external consultations such as random qualitative and quantitative consultations/focus group discussions.</p>	<p>Quarterly</p>	<p>Access to services and infrastructure</p> <p>Qualitative assessment of outreach and impact</p>
<p>Impact – Completion Audit <i>(External)</i></p>	<ul style="list-style-type: none"> <li>- Changing qualitative standards in the lives of PAPs (home and work lives, sanitation, health, access to services, income, education, and skill levels, etc.)</li> <li>- Was the LRP application distributed among PAPs according to the principles of equality and fairness?</li> <li>- LRP packages responded to the real and priority needs of at least 80% of households.</li> </ul> <p>Noticeable, positive changes have occurred in at least 50% of households with LRP support.</p>	<p>External assessment/sign-off report based on performance and impact monitoring reports. Interviews and consultation with affected persons, households.</p>	<p>Quarterly</p>	

# Signature Page

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