

System Development Report

Eligibility criteria

1. Guardian must be a registered self-help group member, and the child must be registered for funding.
2. Guardian must have contributed actively for at least 6 months
3. Guardian must be an active participant in group initiatives.

Funding rules.

1. Funds are divided proportionately if insufficient. (Use of a scaling factor).
2. All eligible members get equal opportunity to funding.
3. Primary school students are automatically rejected.

Maximum funding limits

1. JSS: Up to Ksh 1,000
2. Senior Secondary: Up to Ksh 10,000.
3. Tertiary: Up to Ksh 15,000.

How the system works

Application Submission:

- Students apply for funding via Google Forms.
- Responses are automatically stored in Google Sheets.
- Data Processing (After Deadline): The stored data from Google Sheets is retrieved by Google Apps Script (A cloud-based scripting computer language that will check for one's eligibility and give out results).

Admin runs the script after the application deadline.

- The script verifies eligibility of applicants
- Funds are distributed proportionally based on available funds.

Report Generation:

- A PDF summary report (approved & rejected applicants + allocated amounts) is generated.

What is in the google form

1. Applicant's full name
2. Guardian's full name
3. Guardian's membership number
4. Phone number
5. Level of education applying for (multiple choice)
 - i. Junior Secondary (JSS)
 - ii. Senior Secondary

iii. Tertiary

6. Name of school/institution

7. Guardian's Contribution and activity

- Has the guardian been an active contributor for at least six months? (Yes/No)
- Does the guardian actively participate in the group's activities (yes/No).

Computing the Ideal request total for when funds are limited

We use scaling factor for this:

$$\text{Scaling factor} = \frac{\text{Available funds}}{\text{Ideal request total}}$$

Final allocation = max funding × Scaling factor

Therefore, if scaling factor = 1, all applicants get their max amount.

If scaling factor < 1, applicants get a proportionally reduced amount.

Example calculations

Let's say available funds are Ksh 50,000

However, we have

- **10 JSS students** (each max Ksh 1,000 → total Ksh 10,000)
- **5 Senior Secondary students** (each max Ksh 10,000 → total **Ksh 50,000**)
- **5 Senior Tertiary students** (each max Ksh 10,000 → total **Ksh 75,000**)

Therefore, total requested amount is (10,000 + 50,000 + 75,000) = 135,000

Scaling factor works this way = 50,000/135,000 = 0.37

Hence, final allocations;

JSS: 1,000 × 0.37 = Ksh 370 per student

Senior Secondary: 10,000 × 0.37 = Ksh 3,700 per student

Tertiary: 15,000 × 0.37 = Ksh 5,550 per student

What the App Script code will do

1. The admin will trigger the script to start calculating one's eligibility
2. The script will ask admin to key in available funds.
3. The script will filter out ineligible applicants based on:
 - Guardian must be a registered self-help group member, and the child must be registered.
 - Guardian must have actively contributed for at least 6 months.
 - Guardian must participate in group initiatives.

4. The script will process eligible applicants by:
Categorize applicants by education level (JSS, Senior Secondary, Tertiary).
Assign maximum possible funding:
 - a. JSS: Max Ksh 1,000
 - b. Senior Secondary: Max Ksh 10,000
 - c. Tertiary: Max Ksh 15,000
5. The script will generate a PDF report with:
 - a. All applicants (approved and rejected)
 - b. Allocation amounts
 - c. Total funds distributed
 - d. Remaining balance
6. The PDF report will automatically be emailed to the admins.

