

Survey Report on Female Network/IT Engineers under Asi@Connect NRENs

Chinmay Bepery

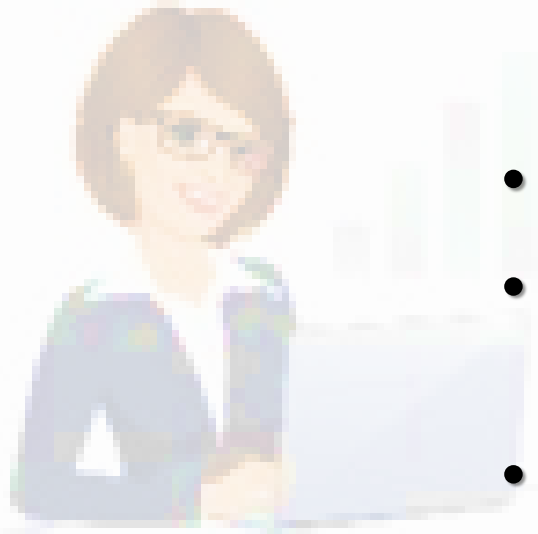
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European Union

Outline

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- SAFE project
 - Moto of survey on Female Network/IT Engineers under Asi@Connect NRENs
 - Conduction of survey
 - Analysis of survey
 - Outcome of survey
 - Impact of survey on SAFE project

SAFE project

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- **Title:** Strengthen the Asi@Connect Female Network Engineer (SAFE): capacity development program for NREN TechGirl and Future IT-Girl (WP3)
 - **Principal Investigator (PI):** Chinmay Bepery/ Department of CIT, Patuakhali Science and Technology University, Bangladesh
 - **Co-PI:** Md. Jahidul Islam, Consultant, College Education Development Project, Ministry of Education, Bangladesh
 - **Period:** OCT 2019~ May 2021(20M)

Activity Summary

- Survey on Female Network/IT Engineers under Asi@Connect NRENs
- Providing TechGirl/Future IT-Girl Fellowships (Registration fees) to attend workshop
- Online webinar course for Asi@Connect Female Network Engineers. Remote participation from all Asi@Connect NREN countries.

SAFE project

Activity Summary

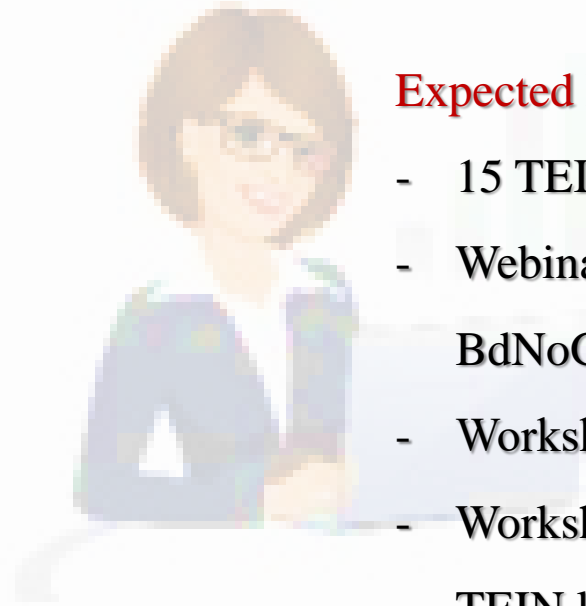
- Strengthen Asi@Connect TechGirl: International Workshop on “Campus Network Design and Security” (Two workshops)
- Strengthen Asi@Connect Future IT-Girl: Local Workshop on deploying Future IT-Girl: “Workshop on Networking Basics, Routing and Switching” (Three workshops)
- Presentation on “Strengthen Asi@Connect TechGirl and Future IT-Girl” project progress in the 49th APAN Meeting, March 02-06, 2020, Kathmandu, Nepal
- Strengthen Asi@Connect Future IT-Girl: International Workshop on deploying Future IT-Girl: “Workshop on Wireless Networking and Cyber Security” (Two workshops)
- Project completion report presentation in the 51th APAN Meeting, Feb/ March 2021, Islamabad, Pakistan and/or APNIC 51, 16 – 26 February 2021, Southeast Asia.
- Submission of project completion report to Asi@Connect/TEIN*CC – April/May 2021



SAFE project

Expected Benefit

- 15 TEIN beneficiary country (AF, BD, BT, KH, ID, LA, MM, MY, IN, PH, LK, TH, VN, NP, PK)
- Webinar course =05 ,Workshop=07, Fellowship course=12, Fellowship=75 (female) of 09 was given in BdNoG 11
- Workshop(Int'l)=50(female), Workshop future ITGirl (local.)=120(female)
- Workshop future ITGirl (Int'l)=44(female), Number of “train-the trainers” =50 (female)
- TEIN link will be highly utilized during the webinar Course, video streaming, and lab session.
- Mitigation of gender issue and female empowerment
- Technical knowledge exchange
- Dissemination of knowledge through webinar program
- Reduce barrier for developing the capacity of female
- Technology Transfer
- Reduction of digital divide within NREN female community



Moto of survey

Target to

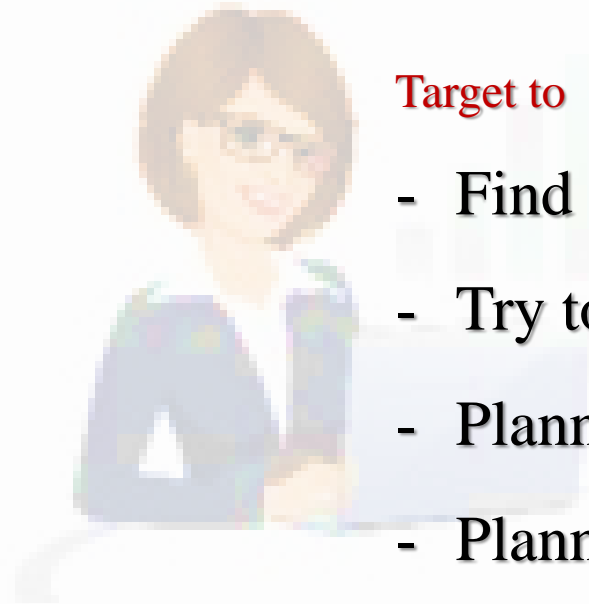
- Conduct a survey among 15 TEIN beneficiary countries NREN as well as their member organization
- Realize organization structure
- ICT manpower
- Connectivity strength
- overall female involvement
- Male-female ratio
- Understand the female capacity as well as contribution in their job (IT related) field according to their skill




Moto of survey

Target to

- Find out prospect of contribution of female in the field
- Try to find out weakness
- Planning for improve their capacity
- Planning for enhance the strength of Future IT Girl in order to upcoming IT related employment



Conduction of Survey

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- Email communication to NRENs as well as member Organization
 - Telephone communication to NRENs as well as member Organization
 - Verbal communication to some member organization in BD
 - Web based survey form and paper based survey form.
 - [Questionnaires for Survey Link](#)

Conduction of Survey

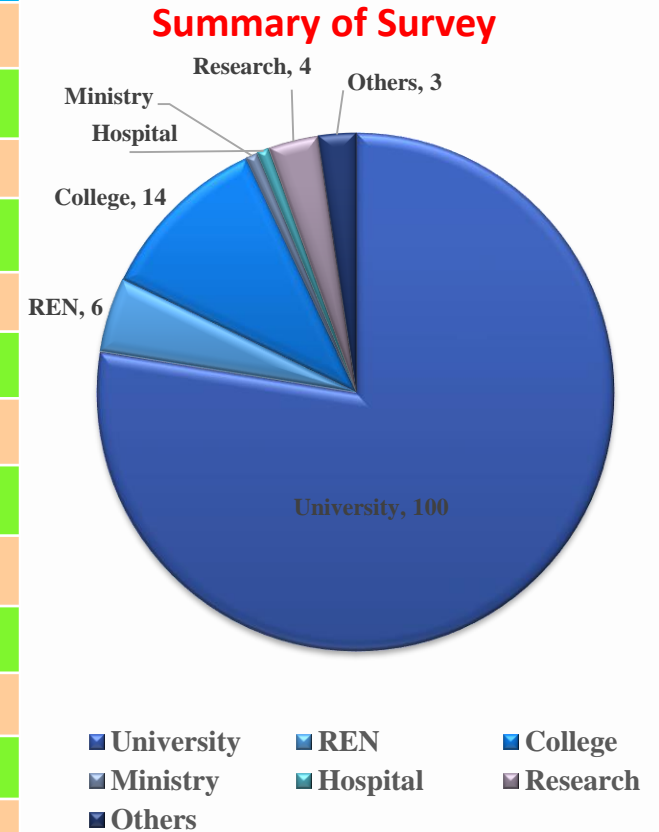


SL	Country	Total NREN Member Organizations (Address/Website/contact number/Email)	Contact Quantity (Email/Phone/Physical etc)
1	Afghanistan	91	119
2	Bangladesh	133	116
3	Bhutan	48	82
4	Cambodia	62	138
5	India	935	1342
6	Indonesia	111	607
7	Laos	8	12
8	Malaysia	143	44
9	Myanmar	149	305
10	Nepal	19	42
11	Pakistan	212	237
12	Philippine	231	450
13	Sri Lanka	52	91
14	Thailand	118	337
15	Vietnam	99	248
	Total	2411	4170

Analysis of survey

Country wise response

SL	Country	Total Responses	University	REN	College	Ministry	Hospital	Research	Others
1	Afghanistan	4	2	1	0	1	0	0	0
2	Bangladesh	56	52	1	0	0	0	2	1
3	Bhutan	16	3	2	10	0	1	0	0
4	Cambodia	3	3	0	0	0	0	0	0
5	India	2	2	0	0	0	0	0	0
6	Indonesia	0	0	0	0	0	0	0	0
7	Laos	2	2	0	0	0	0	0	0
8	Malaysia	4	1	0	2	0	0	0	1
9	Myanmar	5	3	0	2	0	0	0	0
10	Nepal	2	0	1	0	0	0	0	1
11	Pakistan	22	20	0	0	0	0	2	0
12	Philippine	9	9	0	0	0	0	0	0
13	Sri Lanka	3	2	1	0	0	0	0	0
14	Thailand	0	0	0	0	0	0	0	0
15	Vietnam	1	1	0	0	0	0	0	0
	Total	129	100	6	14	1	1	4	3

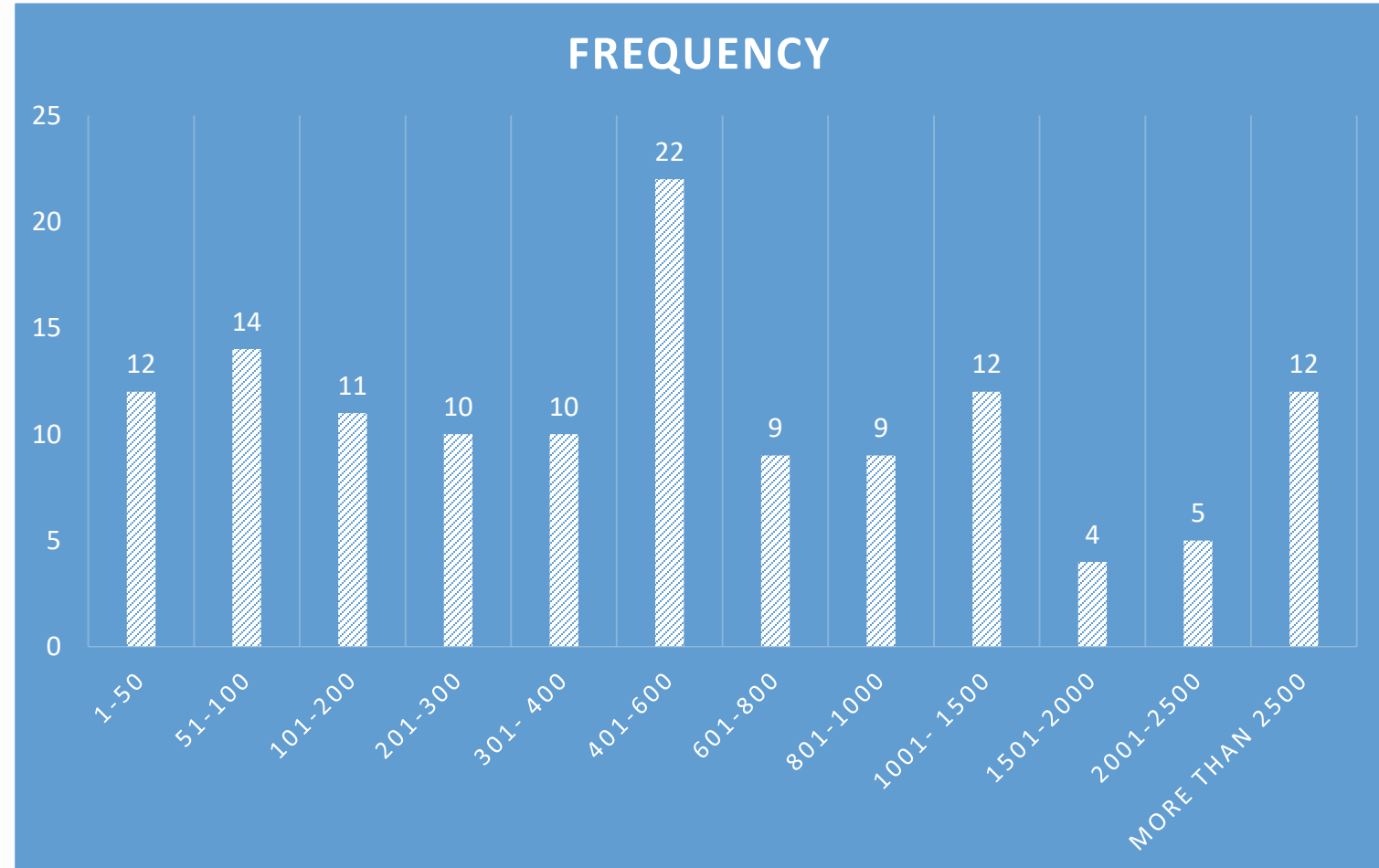


Analysis of survey

Manpower structure



SL	Employee-range	Frequency
1	1-50	12
2	51-100	12
3	101-200	11
4	201-300	10
5	301- 400	10
6	401-600	22
7	601-800	9
8	801-1000	10
9	1001- 1500	12
10	1501-2000	4
11	2001-2500	5
12	More than 2500	12
	Total	129



Analysis of survey

SL	Organization Type	Total Organization	Total Empl.*	ICT employee	Female ICT Emp.	Average ICT Employee Ratio total Emp.	Average Female ICT Employee Ratio total ICT Employee
1	University	100	106181	3942	968	4%	25%
2	REN	6	563	83	30	15%	36%
3	College	14	1401	48	14	3%	29%
4	Ministry	1	500	11	0	2%	0%
5	Hospital	1	430	1	1	0%	100%
6	Research	4	4019	12	1	0%	8%
7	Others	3	4578	1517	303	33%	20%
	Total	129	117672	5614	1317	5%	23%

* Some Responses provide employee range but not exact number. Here middle of the given range (approximate) is considered.

Analysis of survey

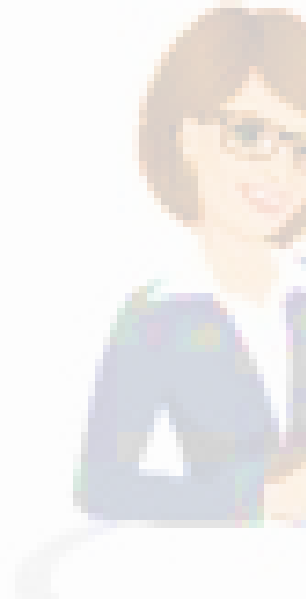
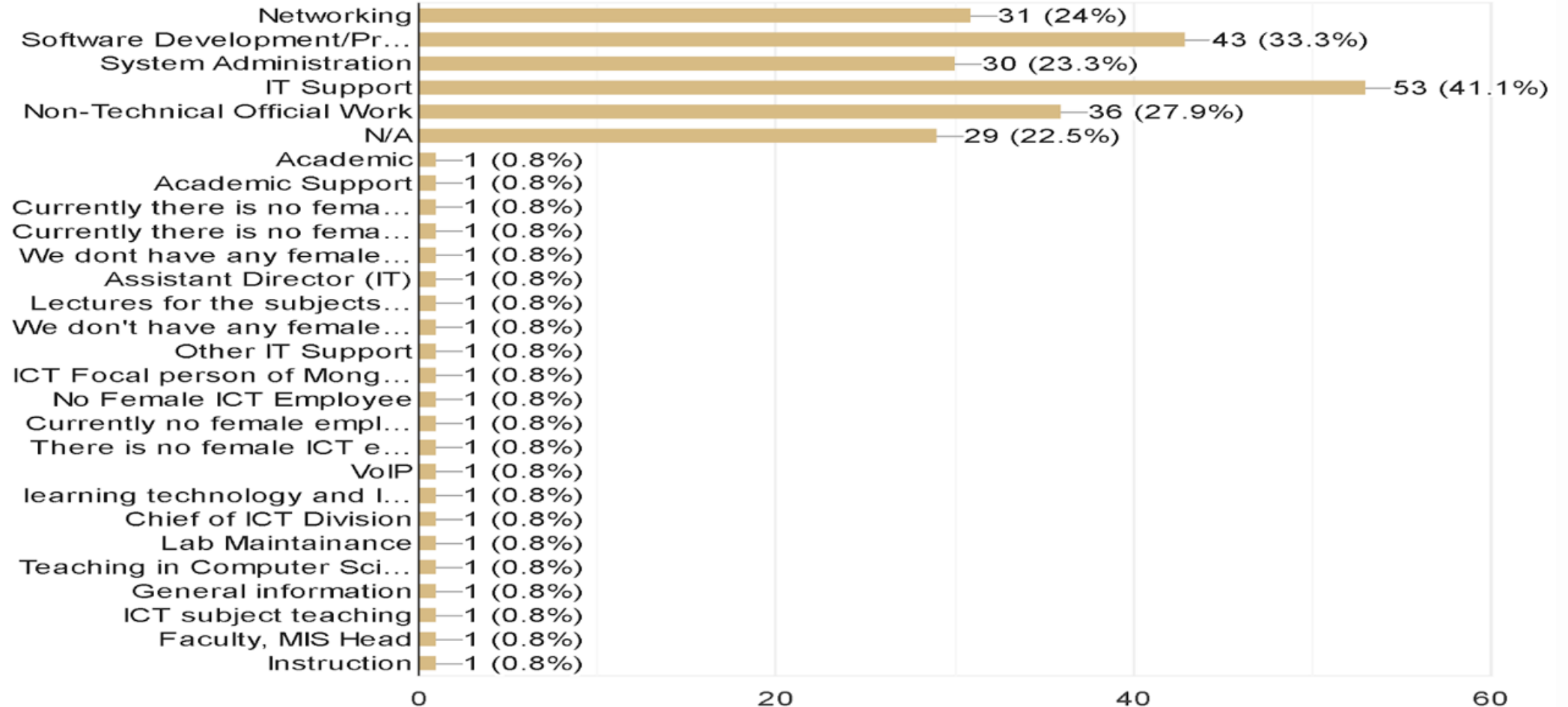
SL	Country	Total Resp.	Total Emp.*	ICT Emp.	Female ICT Emp.	Ratio (ICT Emp. & Total Emp.)	Ratio (Female ICT Emp. & Total ICT Emp.)
1	Afghanistan	4	1032	29	4	3%	14%
2	Bangladesh	56	57383	1292	142	2%	11%
3	Bhutan	16	2329	119	41	5%	34%
4	Cambodia	3	690	26	9	4%	35%
5	India	2	1532	18	0	1%	0%
6	Indonesia	0	0	0	0	U	U
7	Laos	2	1765	30	9	2%	30%
8	Malaysia	4	2217	103	41	5%	40%
9	Myanmar	5	660	301	282	46%	94%
10	Nepal	2	4505	1502	300	33%	20%
11	Pakistan	22	32613	1983	422	6%	21%
12	Philippine	9	8400	181	61	2%	34%
13	Sri Lanka	3	315	17	4	5%	24%
14	Thailand	0	0	0	0	U	U
15	Vietnam	1	4231	13	2	0%	15%
	Total	129	117672	5614	1317	5%	23%

* Some Responses provide employee range but not exact number. Here middle of the given range (approximate) is considered.

Analysis of survey

Responsibilities played by the female ICT Employee

10. Responsibilities played by the female ICT Employee :
129 responses

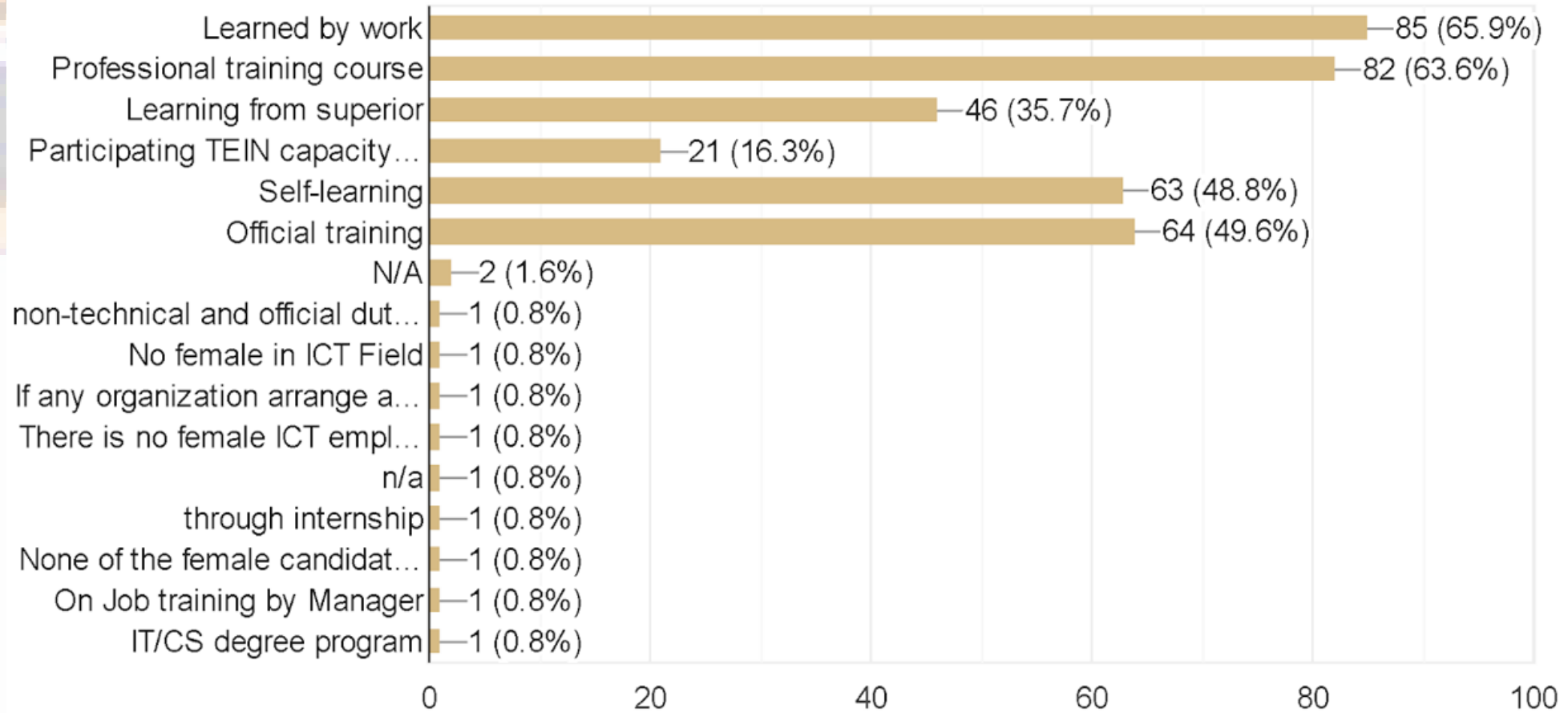


Analysis of survey

How female Network/IT Engineers are become skilled

11. How female Network/IT Engineers are become skilled in respective areas in your country?

129 responses

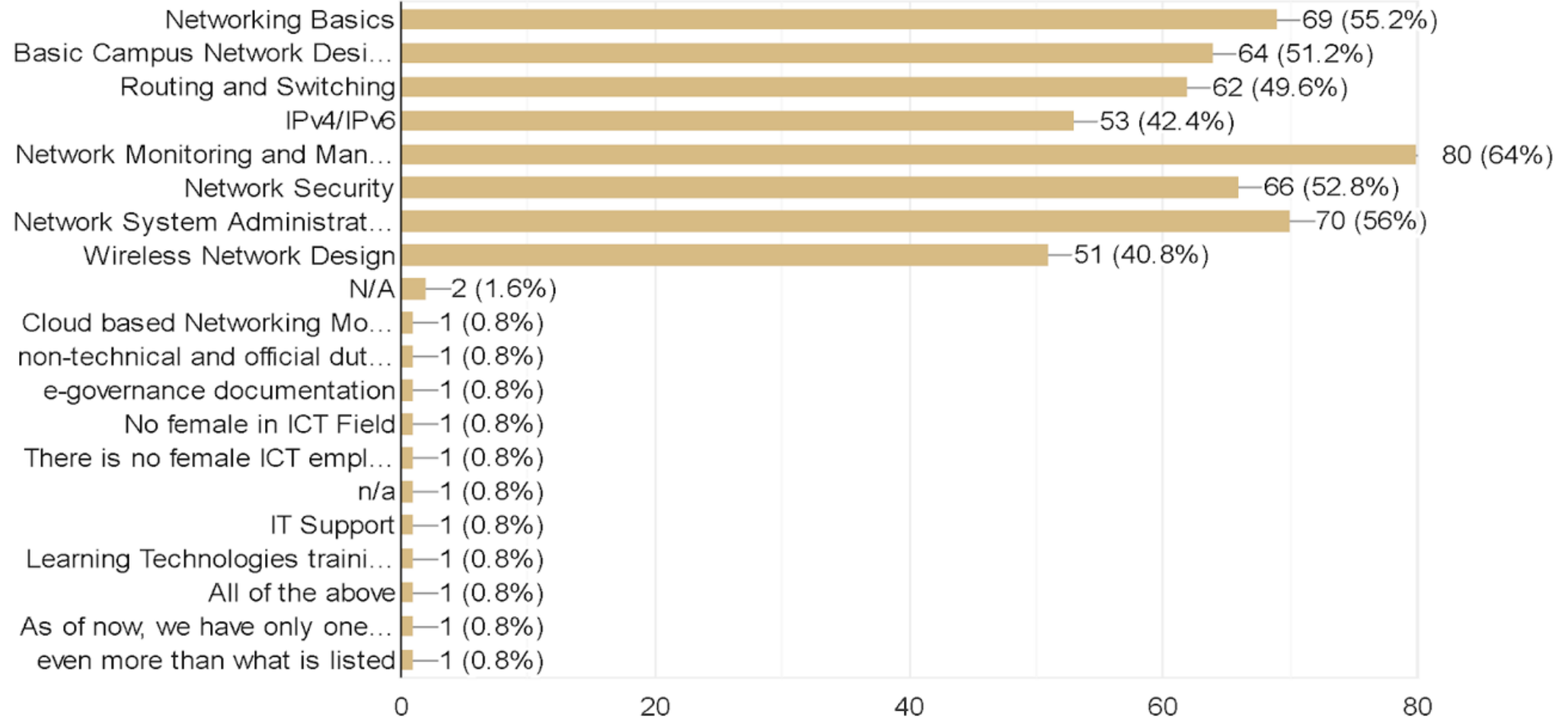


Analysis of survey

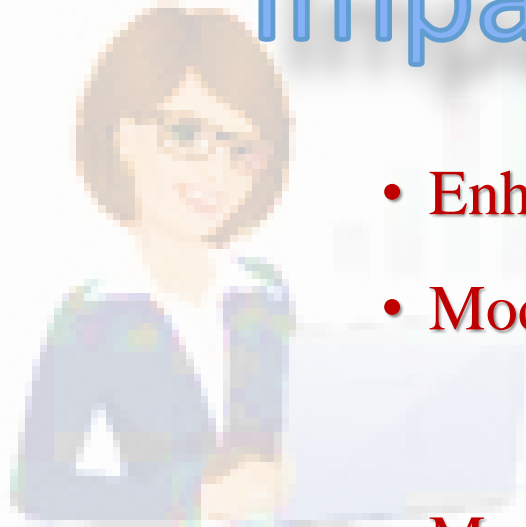
Required network education for female Network/IT Engineers

12. Which network education needs for female Network/IT Engineers?

125 responses



Impact of Survey in SAFE Project

- 
- Enhance the female participants in webinar course
 - Moderate the campaign strategy (virtual and physical) for Future IT-Girl workshop
 - Moderate the topics regarding the workshops according to the survey response
 - A common virtual platform(female) for developing capacity of female will be considered



Thanks

**Strengthen the Asi@Connect Female Network Engineer (SAFE):
capacity development program for NREN TechGirl and Future IT-Girl**

