

Analyzing Labor Market Shifts in the Transition to Green Jobs: Mapping Egypt's Green Jobs

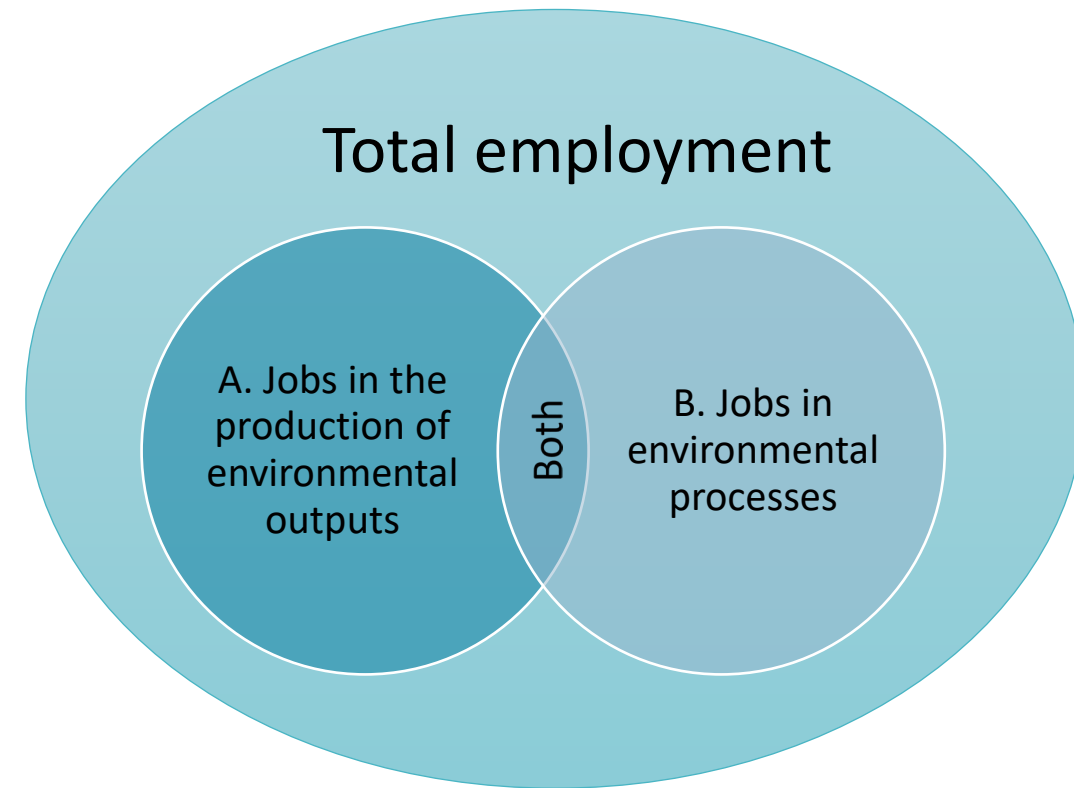
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Overview

- There is a scarcity of studies on green jobs in Egypt.
- The ELMPS 2023 incorporated new questions that align with the ILO 's framework of employment in environmental activities.
- We examine the prevalence and characteristics of green activities and their degree of “greenness”.
 - focusing on sex, sector, economic activity, occupation, employment status, age, and education.
- We explore the diversification of green jobs across sectors according to their degree of “greenness”
- We also compare the attractiveness of green and non-green jobs, looking at factors like wages, social benefits, and job stability.

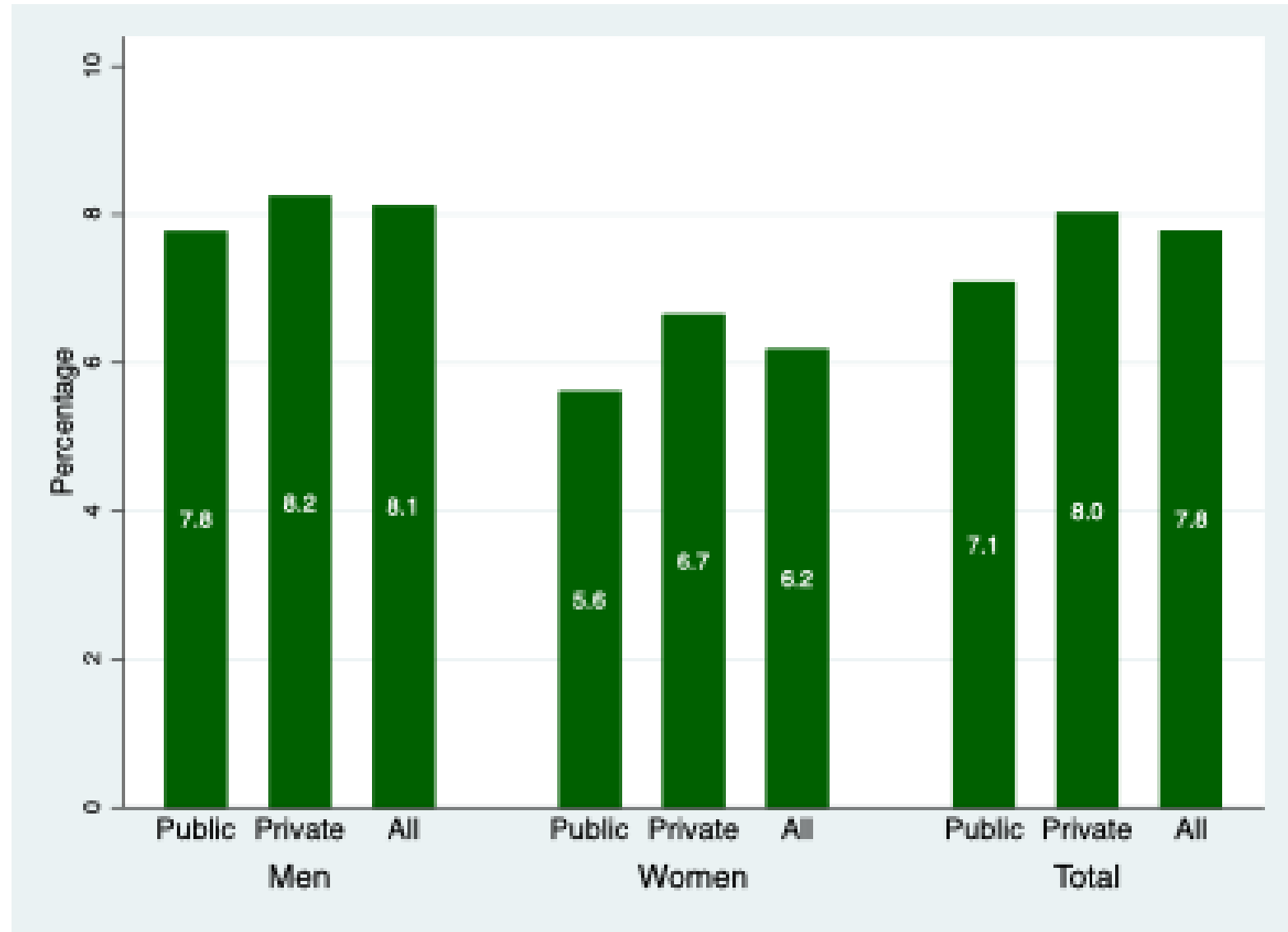
Applying the ILO Approach

- ELMPS 2023 identifies individuals whose jobs involve producing or using specific **environmental goods and services** in areas such as:
 - Renewable energy
 - Energy-efficient goods and technologies
 - Water-efficient goods and technologies
 - Recycling and resource reuse
 - Sustainable agriculture, fisheries, or forestry
 - Prevention, reduction and removal of pollution and air emission
 - Environmental protection and natural resource conservation
 - Environmental compliance, education, training, and public awareness
 - Research, planning, maintenance, and control of environmental technologies
 - Other specified environmental technologies, practices, goods, and services
- Our approach for Employment in **Green Activities**
 - **Production** of environmental **(A)**
 - Use of environmental **processes (B)**
 - Employment combining **both** the production and process of environmental good and services



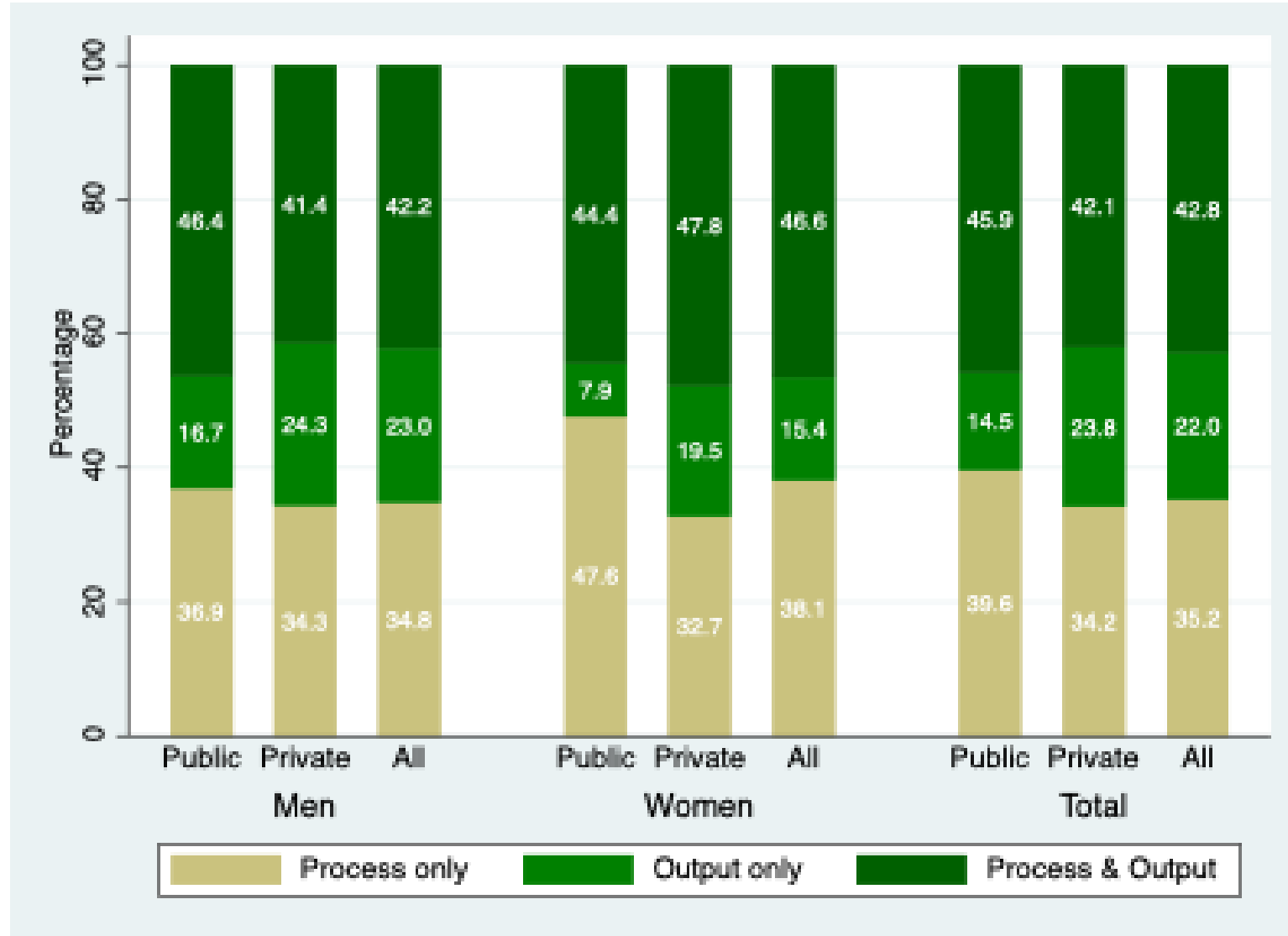
Share of Green Activities in Total Employment

- 2.1 million workers are employed in green activities with a strong concentration in the private sector (1.7 million jobs) and a notable male dominance (1.8 million jobs).
- Green jobs represent a small share in total employment: 7.8%
- A higher proportion is found in the private sector (8.0%), compared to the public sector (7.1%)
- Gender gap: 8.1% of men are employed in green activities versus 6.2% of women
- The gender disparity is even more pronounced in the public sector (7.8% vs. 5.6%)



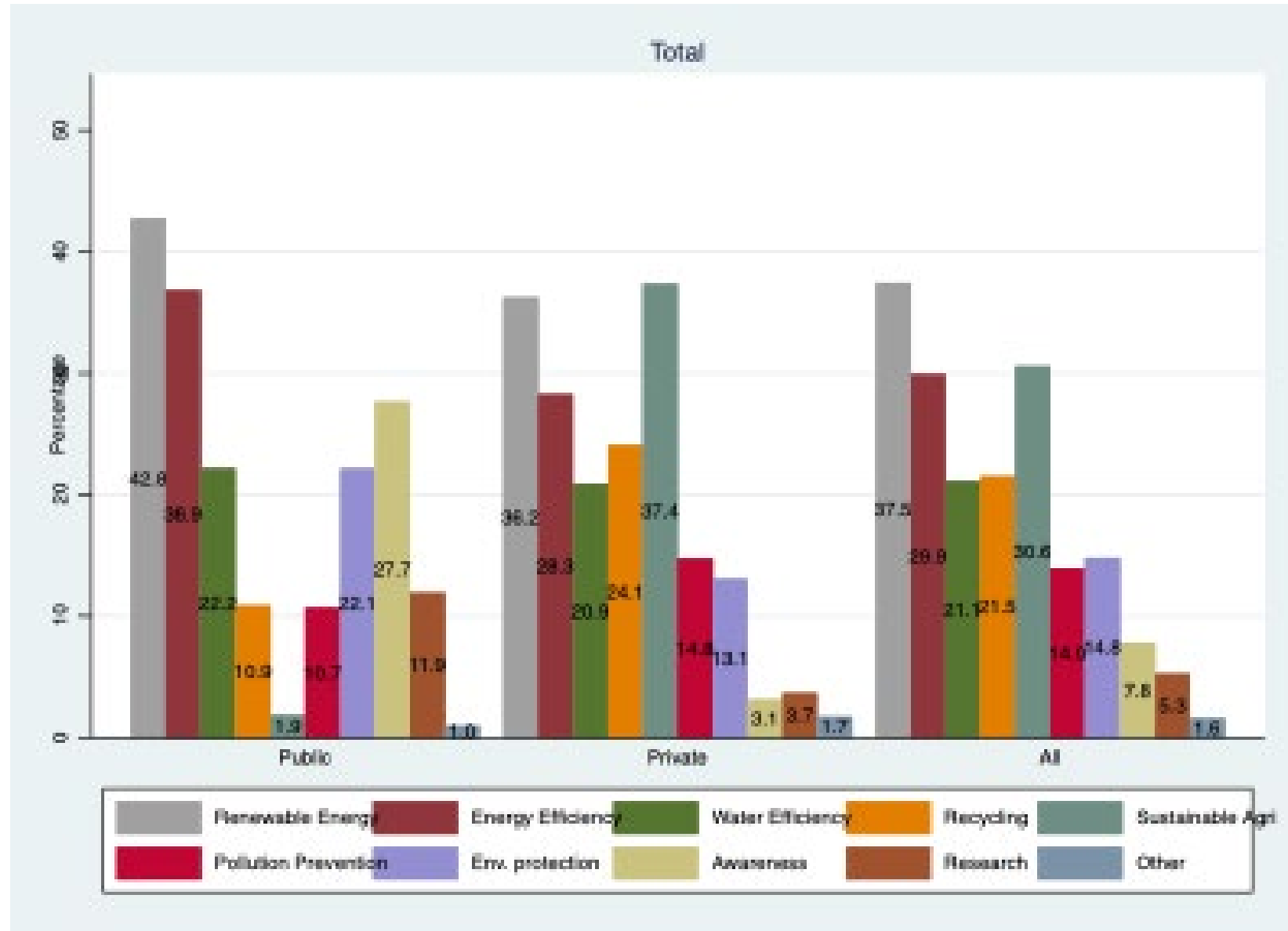
Distribution of Green Activities by Output/Process Type

- Jobs that combine « Process & Output» account for the largest share (42.8%), followed by « Process only » (35.2%)
- Jobs centered on « Output only » represent 22%.
- Gender and institutional sector disparities
 - Employment in « Output-only » activities is more common in the private sector, likely driven by agricultural activities.
 - Jobs combining « Process and Output » are more prevalent in the public sector.
 - Men are more engaged in « Output only » roles than women across both the public and private sectors.



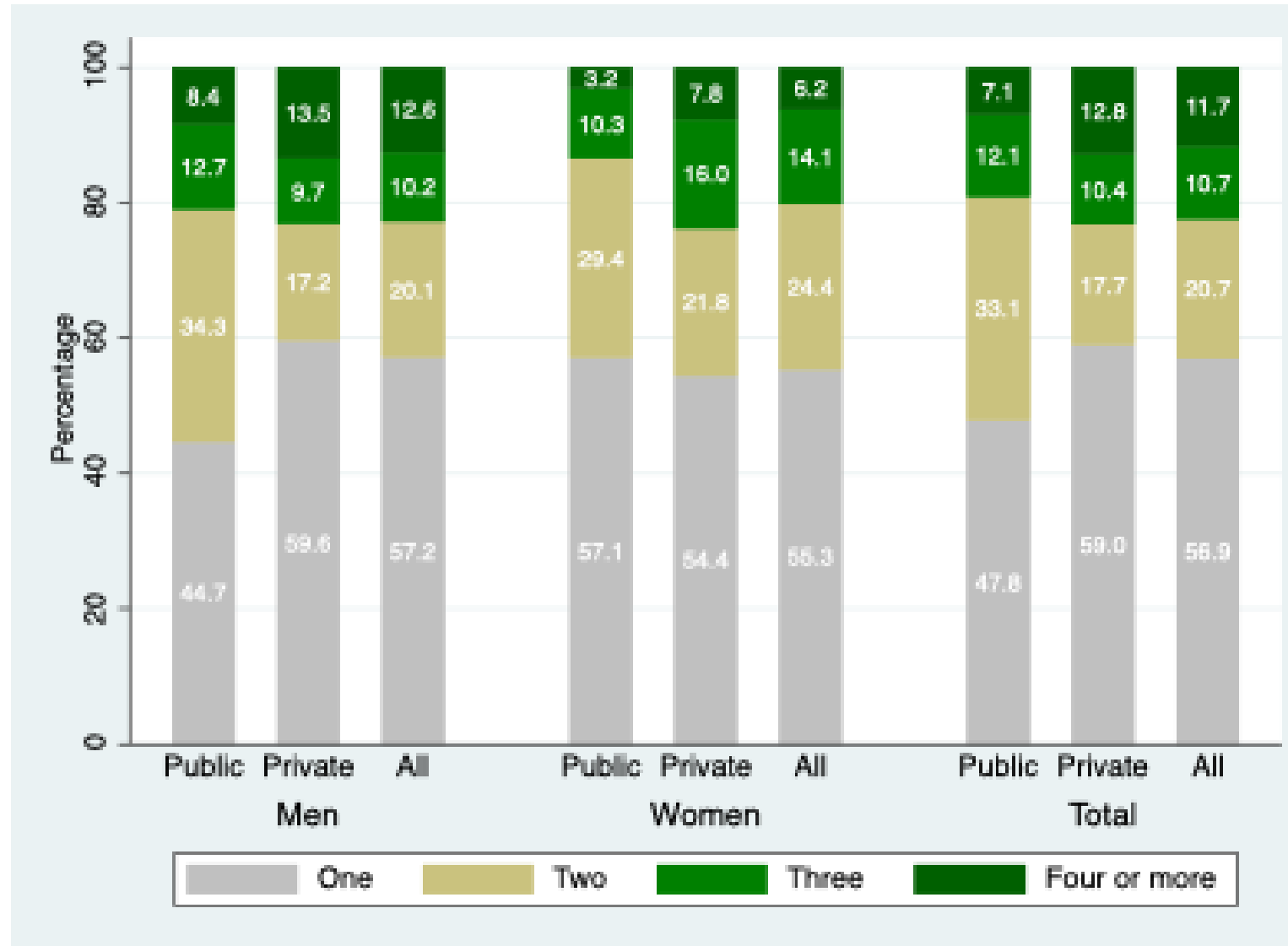
Key Aspects of Green Jobs

- The most common aspects for green jobs include: renewable energy, sustainable agriculture, energy efficiency, water efficiency, and recycling.
- To a lesser extent: environment protection and pollution prevention.
- Sustainable agriculture is very low
- Public vs Private sector disparities:
 - The **public sector** is more active in renewable energy, energy efficiency, water efficiency, environmental protection, awareness initiatives, and research.
 - The **private sector** focuses more in sustainable agriculture, recycling, and pollution prevention.



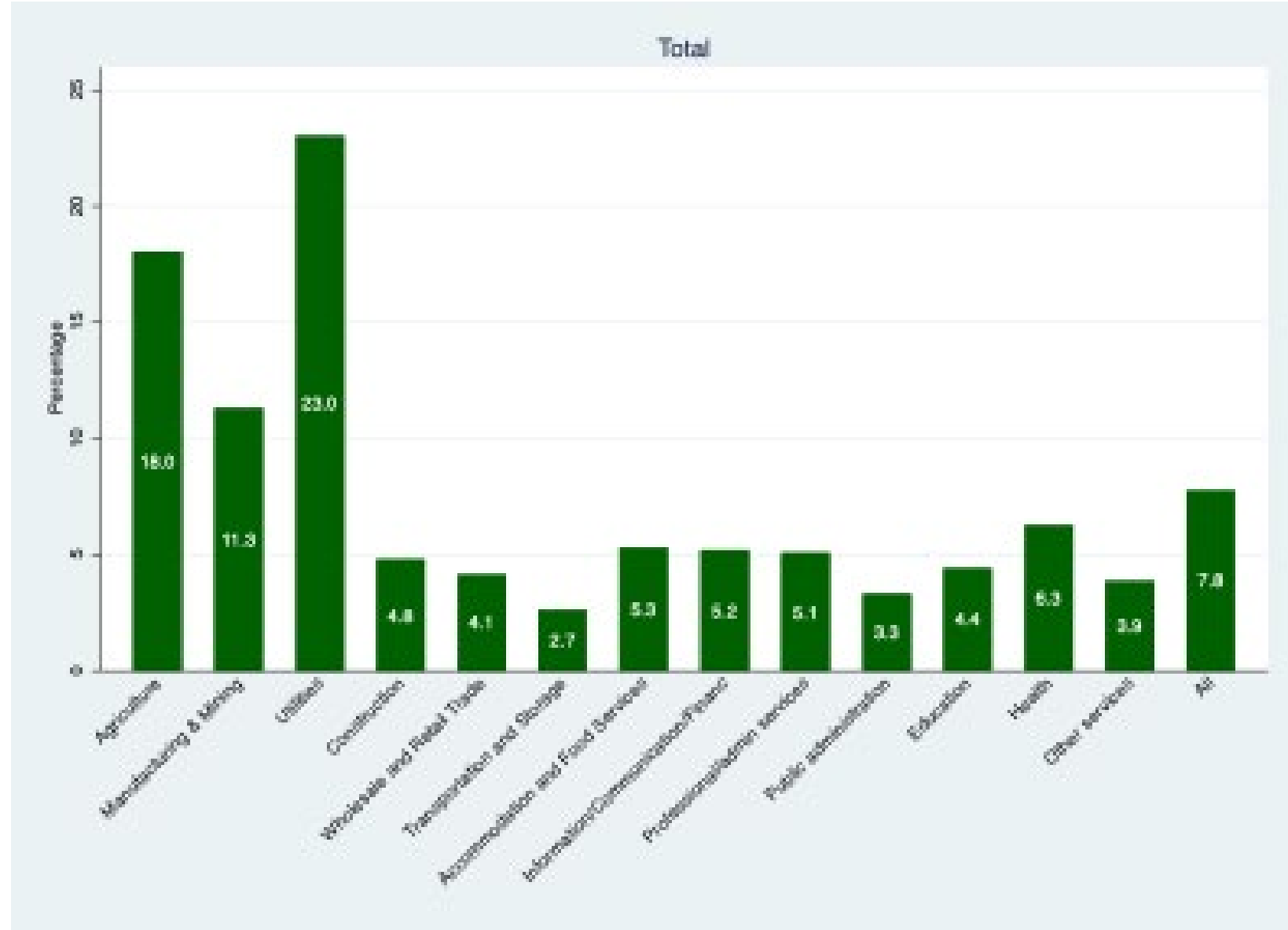
Incidence of Green Aspects

- The majority of green jobs address only one green aspect (56.9%).
- And over 75% of green jobs incorporate just one of two green aspects.
- Green jobs focusing on a single green aspect or requiring four or more aspects are more common in the private sector than in the public sector.
- Women in the public sector are the least likely to engage in roles involving multiple green aspects (3.2%).
- Men in the private sector are more likely to specialize in a single green aspect or in four or more green aspects (13.5%).



Distribution of Green Jobs by Economic Activity

- Green jobs are predominantly concentrated in a few sectors: Utilities(23.0%), agriculture (18.0%), and manufacturing/mining (11.3%).
- Gender disparities:
 - Men have higher representation in green jobs within agriculture, manufacturing, construction, information and communication, professional and administrative services as compared to women
 - Women have greater shares of green jobs within the utilities sector (public sector)



Economic Activity by Green Incidence

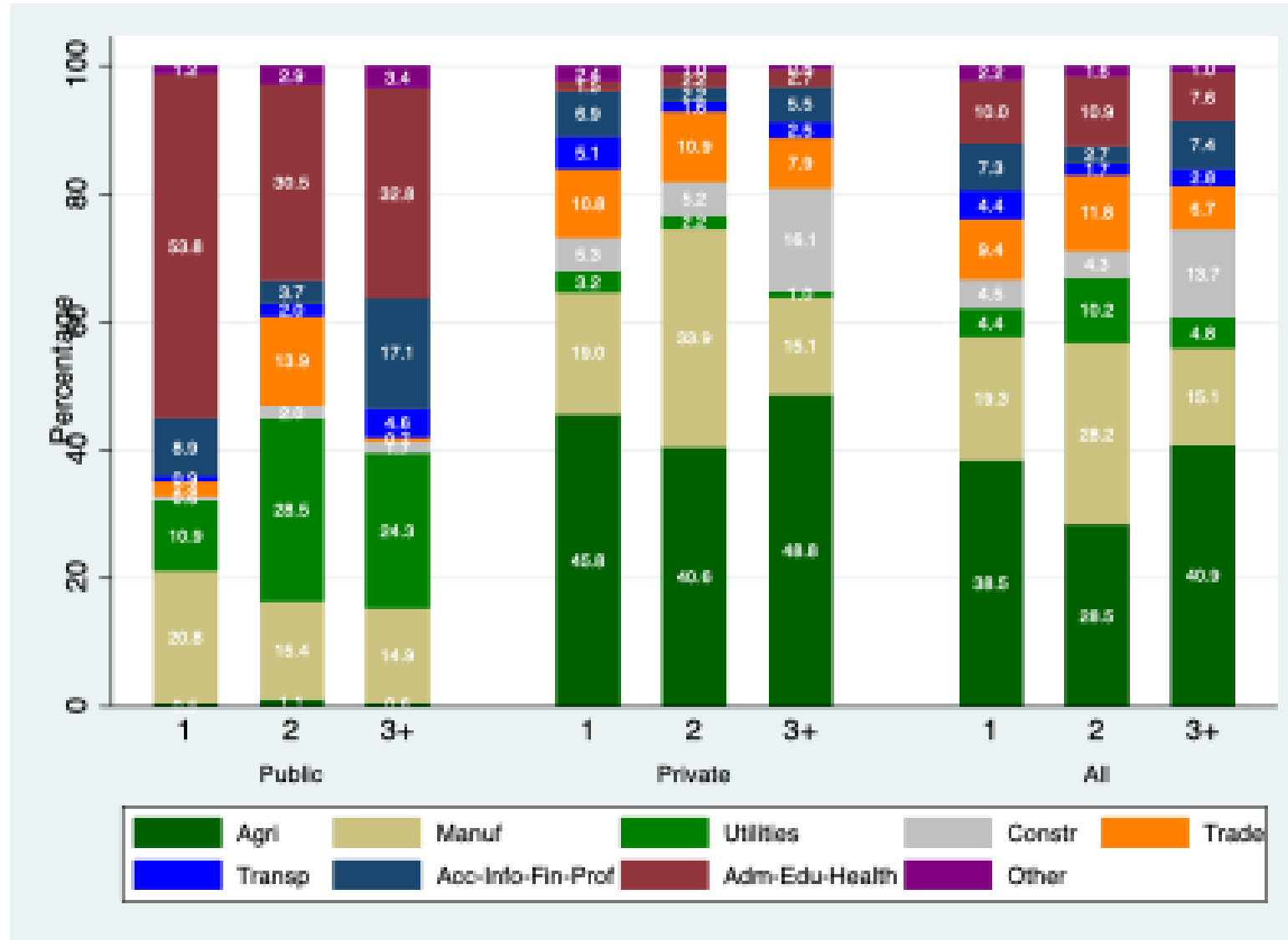
- The distribution of economic activities varies with the number of green aspects (1-2 aspects vs. 3 or more aspects) in both the public and private sectors.

- Public sector**

- Green jobs are concentrated in administration, education, and health, followed by utilities and manufacturing.
- When two green aspects are involved, trade gains importance.
- For three or more green aspects, trade disappears, and sectors like accommodation, finance, and professional activities play a more significant role.

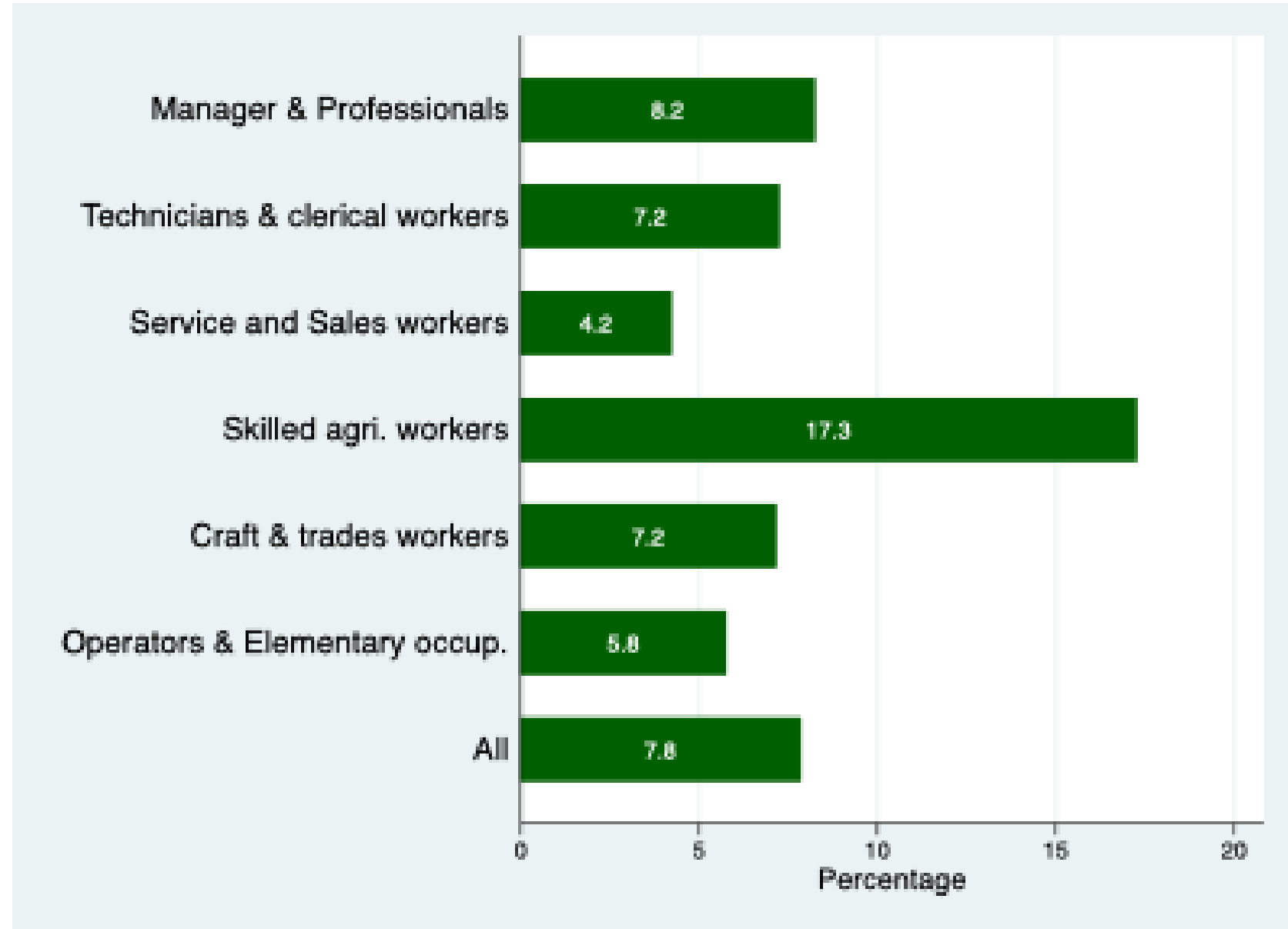
- Private sector**

- For jobs with one or two green aspects, the dominant sectors are agriculture, manufacturing, and trade.
- For jobs with a higher incidence of green aspects, construction emerges as a key sector in green employment.



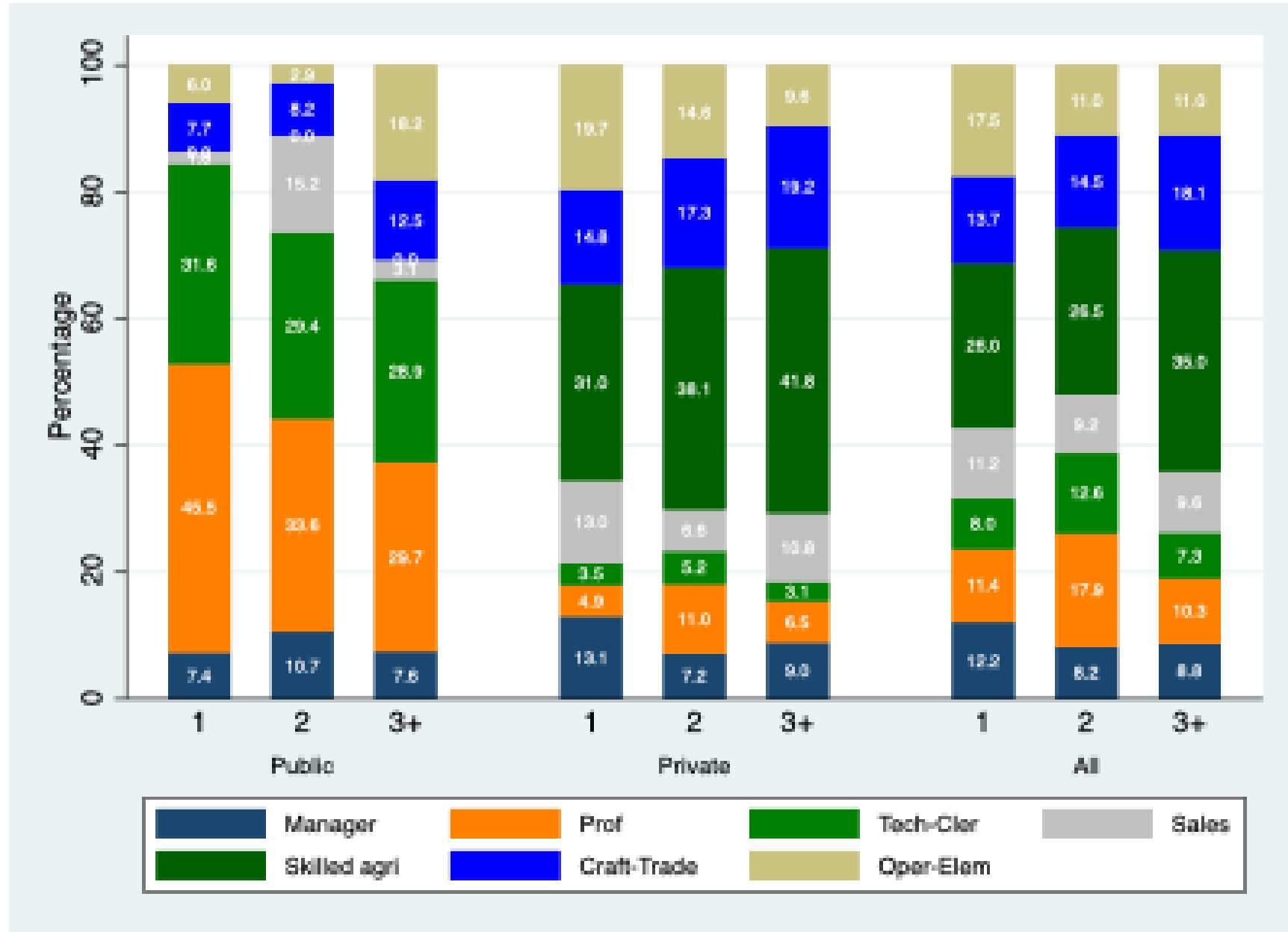
Green Job Distribution by Occupation

- Overall, skilled agricultural workers (17.3%), particularly among men, represent the highest share of green jobs, followed by managers and professionals, technicians and clerical workers, and craft and related trade workers.
- For women, the share of green jobs by occupation remains low (6%) for each occupation, except for skilled agricultural worker (13.3%)s.



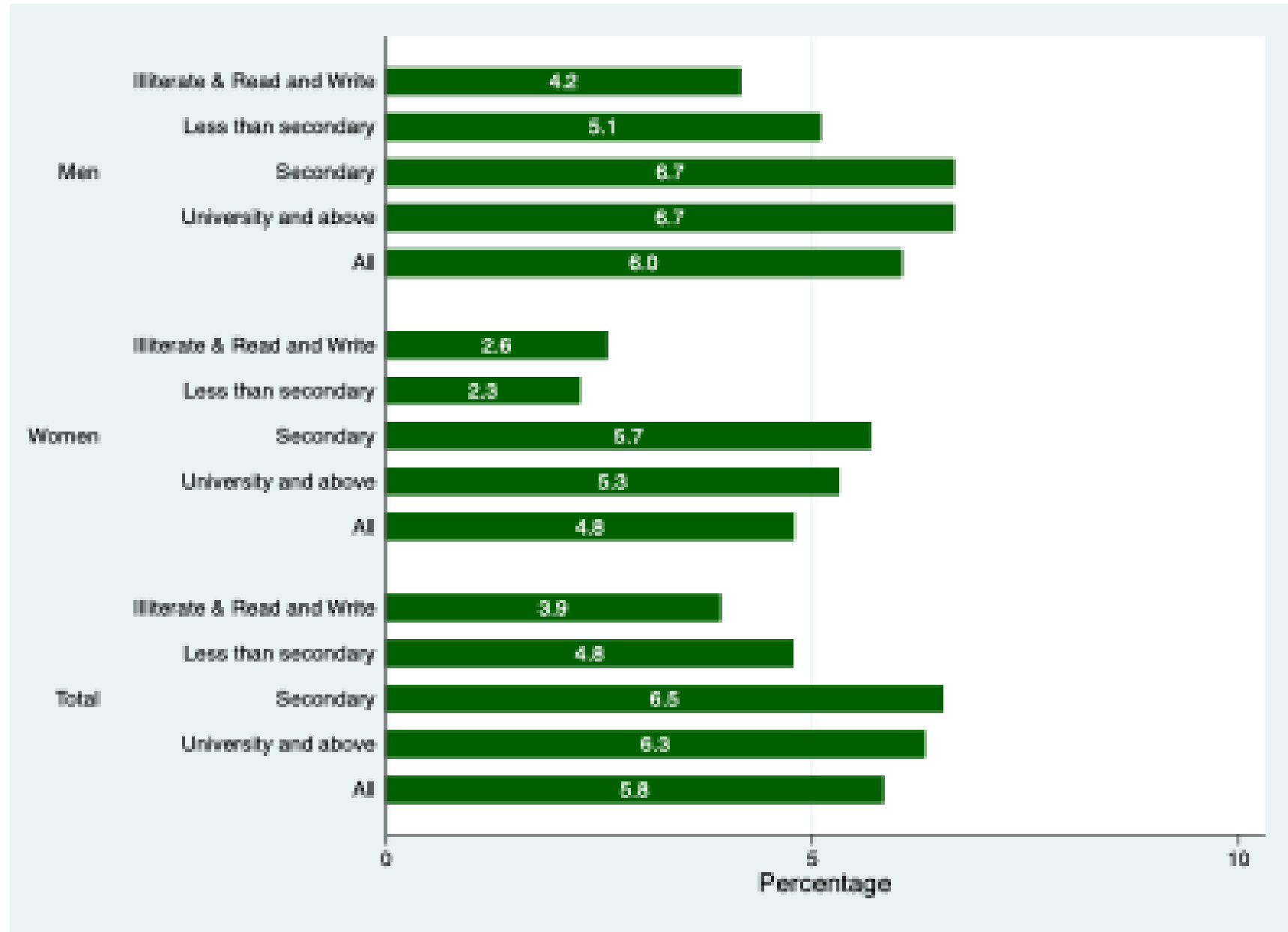
Occupation by Green Incidence

- Large public/private disparities
- Public sector
 - High prevalence among professionals and technical-clerical workers dominate green jobs. But, their shares decrease as the degree of greenness increases.
- Private sector
 - Skilled agricultural workers largely dominate green jobs, followed by craft and related trades workers. And their shares increase with “greenness”.



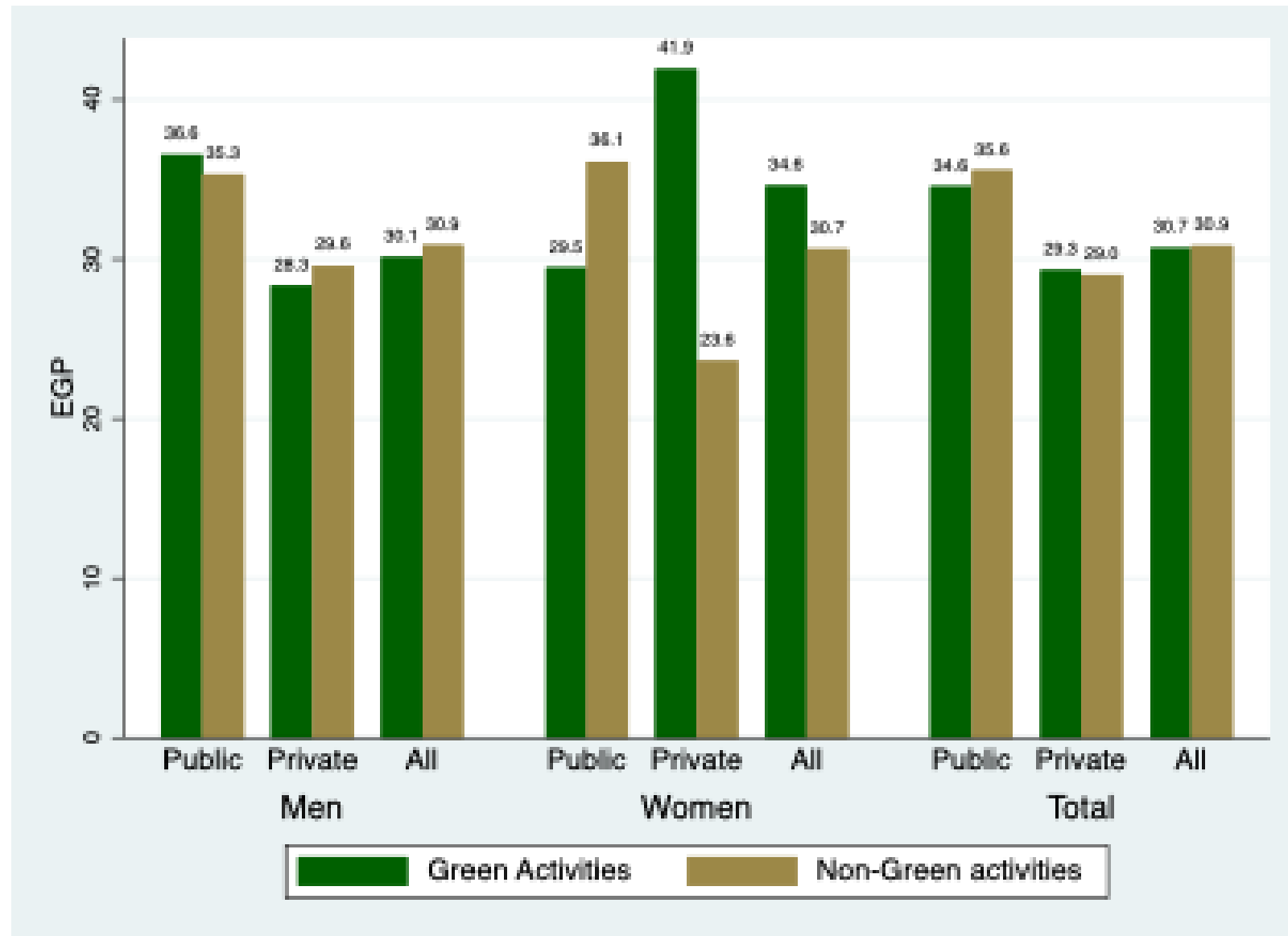
Distribution of Green Jobs by Education (Excluding Agriculture)

- Higher education levels substantially increase access to green jobs for both men and women.
- This trend is particularly pronounced among women, where the share of green jobs for those with secondary or above education is more than twice that of those with less than secondary education.



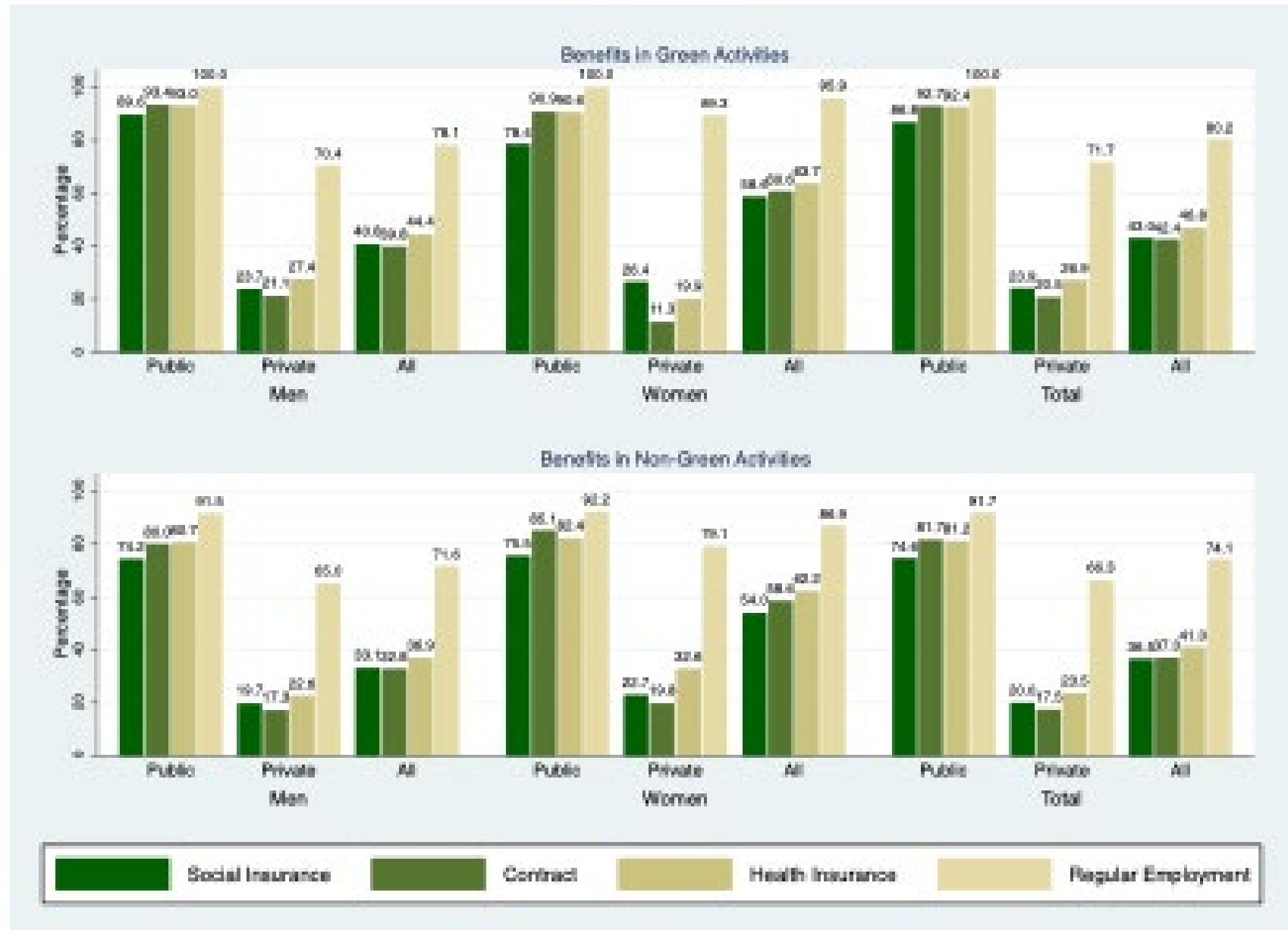
Hourly Wage Green vs Non-Green Jobs

- Overall, hourly wages are comparable for green and non-green jobs.
- There are notable gender and sector disparities:
 - Men earn slightly more in green jobs within the public sector, but earn less in green jobs within the private sector (formal and informal employment).
 - Women, on the other hand, earn substantially less in green jobs within the public sector, but earn considerably more in green jobs within the private sector (informal employment).



Social Benefits and Employment Stability by Activity Type

- Overall, green jobs are more attractive and more decent compared to non-green jobs in terms of social security, contract, health insurance and job stability for both men and women and in both across the public and private sectors.
- The only exception is for women in the private sector where non-green jobs show a higher incidence of a formal employment contract and access to health insurance.
- The advantages of green jobs over non-green jobs are more pronounced for men than for women.



Key findings

- Green activities represent a **small fraction of total employment**; they are more prevalent among men and the private sector.
- The prevalence of green jobs is notably **higher among individuals with secondary and university-level or higher education** (in particular for women).
- **Attractiveness**
 - **Overall, green jobs are not more attractive in terms of wages.**
 - For men in the private sector (both formal and informal), green activities tend to offer lower wages.
 - For women, however, green activities in the formal private employment provide substantially higher wages compared to non-green activities.
 - **Green jobs generally offer better benefits**, with the exception for women in the private sector (contract and health insurance).
- **Most green jobs are not very green and not diversified across sectors**
 - Green activities are concentrated in key sectors such as agriculture, manufacturing, administration, education, and health. However, most of these jobs address only one environmental aspect.
 - Multi-aspect green jobs are currently concentrated in agriculture, with limited shares in manufacturing and construction.
 - Expanding multi-dimensional green jobs in sectors like manufacturing, utilities, and transportation is crucial for sustainable economic growth and environmental resilience.