

The Women in Armed Rebellion Dataset (WARD) Version 1.3

Dataset Description and Codebook
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Description of Dataset¹

The Women in Armed Rebellion Dataset (WARD) provides information on the presence and prevalence of female fighters for a sample of over 300 rebel organizations active between 1964 and 2014. We use the list of groups included in the UCDP Dyadic Dataset (Harbom, Melander and Wallensteen, 2007 v.1-2015) to generate our base sample of armed groups. Because the primary intention of WARD is to identify female fighters in rebel groups, international conflicts and civil conflicts that involve only military factions (e.g., coups) are excluded. Overall, WARD includes data on 72% of cases included in the UCDP Dyadic Dataset for the years included in the sample. After excluding military factions and coups, WARD covers approximately 80% of the cases in the UCDP Dyadic Dataset.²

The indicators included in WARD are constructed from a wide variety of publically available sources, including news reports, academic accounts (e.g., books and articles), biographies,

¹ Adapted from Wood and Thomas (2017) and Wood (2019).

² The missing cases represent instances in which the researchers were simply unable to find sufficient information to make any designation regarding women's participation. Typically, these represent small groups or those that existed for only short periods and for which very little information of any type is available.

governmental sources, and international and non-governmental organization reports. The sources used to code data on specific groups are available upon request.³

The conceptualization and operationalization of female fighters used in WARD draw on definitions commonly used in disarmament, demobilization, and reintegration (DDR) programs sponsored by the United Nations and related international organizations. These programs often differentiate “female combatants” from “females associated with armed groups” (UN Women 2012, 22-23). Specifically, they define these categories as follows:

Female combatants: Women and girls who participated in armed conflicts as active combatants using arms.

Female supporters/females associated with armed forces and groups: Women and girls who participated in armed conflicts in supportive roles, whether coerced or voluntarily. These women and girls are economically and socially dependent on the armed force or group for their income and social support. Examples: porters, cooks, nurses, spies, administrators, translators, radio operators, medical assistants, public information workers, camp leaders, or women/girls used for sexual exploitation.

The variables included in WARD reflect these basic definitions. “Female combatants” refers to all female members who underwent military training, received combat arms, and directly participated in organized violence on behalf of the organization in any capacity during the conflict. This definition excludes women and girls who exclusively occupied non-combat support roles. It is important to note, however, that while female members of rebel movements often occupy multiple roles that blend combat and non-combat activities, a key criteria for the non-combat designation is that these women did not receive combat training, carry weapons, or engage in the direct production of violence.

A primary challenge in coding information on women’s participation in rebel movements is that the boundary between formal combatant and other roles are often blurred, particularly in the

³ We are currently compiling a set of case narratives, which will include detailed bibliographies for each group. In the meantime, please feel free to contact Reed M. Wood for more detailed information on the coding of specific groups.

case of guerrilla conflicts. Consequently, the definition of combatant applied by WARD includes women employed in an array of activities ranging from frontline infantry, to local militias, to women who were primarily deployed in support roles but who, by virtue of their training and access to weapons, engaged in combat when the situation demanded. The operational criteria for “fighter” used in the coding process includes any references to women undertaking any of the following activities on behalf of the rebel group:

- Using arms in combat, including during defensive actions (e.g., protecting camps, returning fire when attacked during non-combat operations, etc.) or against civilian targets.
- Operating artillery or anti-aircraft weapons against enemy targets
- Service in auxiliary and militia forces, provided that they sometimes participated in offensive or defensive combat operations.
- Detonating mines or other explosives against enemy or civilian targets
- Conducting assassinations
- Conducting suicide bombings

Making a determination regarding the presence of female combatants in an organization requires the confirmation of three independent sources. Where reports explicitly state that women did not participate in combat, where women’s roles were described as exclusively supportive (e.g. caregivers, fundraisers, couriers, etc.), or where it was not possible to locate any evidence of women participating in combat (despite locating substantial information regarding other group characteristics), the group was coded as not including female combatants.

WARD includes a number of specific indicators that reflecting the presence and prevalence of female fighters in an armed group. **Cat4_prevalence_best** is a categorical indicator roughly accounting for the estimated proportion of a group’s combat force that was composed of women. The categories range from 1, indicating “No Evidence” of female combatants, to 3, representing a “high” prevalence of female combatants. WARD relies on a categorical indicator rather than a continuous measure of the proportion of female combatants because different sources sometimes

provide varying estimates of the numbers of women serving as combatants.⁴ Additionally, in many cases the sources provide only qualitative descriptions of the extent of women’s participation (e.g., “rare”, “small numbers”, “very few”). This is particularly true of groups that appear to have few female combatants. The blunter coding scheme therefore reflects a tradeoff between precision and confidence in the measure. The table below briefly describes the categories of this variable.

Description of cat4_prevalence_best Categories

Category	Prevalence	Estimated Percentage	Examples
0	No evidence	0%	Mouvement des Forces Démocratiques de Casamance (MFDC), Abu Sayyaf Group (ASG), Eritrean Liberation Front (ELF)
1	Low	< 5%	People’s Front for the Liberation of Palestine (PFLP), Provisional Irish Republican Army (PIRA), Resistência Nacional Moçambicana (RENAMO)
2	Moderate	5 - 20%	Euskadi Ta Askatasuna (ETA), Liberation Tigers of Tamil Eelam (LTTE), Contras
3	High	> 20%	Movement for Democracy in Liberia (MODEL), Fuerzas Armadas Revolucionarios de Colombia (FARC), Tigrayan People’s Liberation Front (TPLF)

In addition to the prevalence variable described above, WARD also includes several other indicators. Owing to both conflicting estimates of the extent of women’s participation and the fact that available sources do not always clearly differentiate between female combatants and women who engaged in non-combat roles, WARD also includes an alternative “high” estimate of the female combatant prevalence indicator. This variable is labeled **cat4_prevalence_high** in the dataset.

⁴ Where estimated female troops numbers are reported, we estimate the proportion of female combatants by dividing the estimated number of female fighters by the total number of combatants reported in the NSA Dataset (Cunningham, Gleditsch and Salehyan 2013).

Cat4_prevalence_best should be seen as the more conservative estimate. In general, it relies on a stricter interpretation of what constitutes a fighter (e.g., direct evidence of participation in combat) and reports the number/percentage of female combatants most commonly cited in the source material. **Cat4_prevalence_high** relies on a more liberal definition of “fighter” and may include women that were formal members of the military wing of an organization but clear evidence of combat participation is lacking (e.g., women “guerrillas” that participated as couriers, nurses, clerks, porters, etc.). It also relies on the upper bound of the number/percentage of female combatants reported in the source documents.

In some rebel organizations, particularly Islamist factions, women are present but their combat roles are limited strictly to serving as suicide bombers. The variables described above include these female fighters in the categorical score. In all cases, groups that explicitly limit women’s participation to suicide bombers receive a score of “1”. These “troops” are distinct from other combat forces in terms of their level integration, modes of recruitment, training, etc., and some users may not consider them as “combatants” for the purposes of their research. As such, WARD also includes an additional set of indicators that excludes these women from a group’s categorical prevalence score. These variables are labeled **cat4_prevalence_exs** and **cat4_prevalence_high_exs** respectively. WARD also includes a set of binary indicators based on each of the categorical indicators. These indicators simply reflect the presence of female combatants in an armed group. They are labeled **female_combatants_best**, **female_combatants_high**, and **female_combatants_exs**. The latter again excludes female suicide bombers.

Lastly, WARD includes the variable **low_information**. This binary indicator denotes cases for which no/very little specific information on women’s participation in the group as combatants or non-combatant members could be located despite the existence of substantial information about other aspects of the organization. The cases receiving a score of “1” on this variable are assumed to

have no female combatants, but the presence or absence of female combatants could not be reliably confirmed with available data sources. For all cases coded as “0”, specific information either confirming women’s participation or explicitly denying their participation was located. As a robustness check, users may wish to control for the limited amount of information available for these groups or to exclude “low information” groups from their analyses.

References

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Description of variables included in the Women in Armed Rebellion Dataset (WARD) (v1.3)

sideb: The name of the rebel group under observation (from UCDP Dyadic Dataset).

sidea: The government that is the primary target of the armed non-state actor's rebellion (from UCDP Dyadic Dataset).

sidebid: The unique identifier for the rebel group (from UCDP Dyadic Dataset [current as of v19.1]).

sidebid_old: The previously used unique identifier for the rebel group (from UCDP Dyadic Dataset [through v4-2016]).

dyadid_old: The previously used unique identifier for the rebel-government pairing (from UCDP Dyadic Dataset [through v4-2016]). Note: the same group may appear in multiple unique dyads. However, WARD scores do not vary across different dyads involving the same group.

gwnoa: Unique identifier for sidea of the conflict (from UCDP Dyadic Dataset).

cat4_prevalence_best: Four-category indicator measuring prevalence of female fighters in the rebel organization. Reflects "best" estimate.

cat4_prevalence_high: Four-category indicator measuring prevalence of female fighters in the rebel organization. Reflects "high" estimate.

cat4_prevalence_exs: Four-category indicator measuring prevalence of female fighters in the rebel organization *excluding cases in which female combatants only served as suicide bombers*. Based on "best" estimate.

cat4_prevalence_high_exs: Four-category indicator measuring prevalence of female fighters in the rebel organization *excluding cases in which female combatants only served as suicide bombers*. Based on "high" estimate.

female_combatants_best: Binary indicator for presence of female combatants. Based on "best" estimate.

female_combatants_high: Binary indicator for presence of female combatants. Based on "high" estimate.

female_combatants_exs: Binary indicator for presence of female combatants *excluding cases in which female combatants only served as suicide bombers*. Based on "best" estimate.

low_information: Binary indicator denoting cases for which no/very little specific information on women's participation in the group as combatants or non-combatant members could be located despite the existence of substantial information about other aspects of the organization.