

**Supplementary File 1:**

The geographic population units in the NWS region with their population size and cluster allocation according to the PPS approach

Governorate	Geographical unit	Population size	Cluster Number(s)	Cluster Name(s)
Idlib 32 clusters	Ariha	66238	1	Ariha
	Ehsem	14826		
	Mhambal	40394	2	Mhambal
	Armanaz	74599	3	Milis
	Dana	1075395	4,5,6,7,8,9,10, 11,12,13,14,15	Sarmada, Aldana, Kafr Deryan,Qah,Selwa, Termanin, Tilaada, Tal Elkarama camp AlKarameh camp, Al-Sarowt camp, Kafr Lusin camp,
	Harim	70975	16	Harim
	Kafr Takharim	38012		
	Qourqeena	101566	17,18	Qourqeena, Kafr Aruq camp
	Salqin	277914	19,20,21	Azmarin, Saidiyeh, Abu Talha camp
	Bennsh	36241		
	Idlib	297699	22,23,24,25	North Neighbourhood, South N., East N., Surrounding camp.
	Maaret Tamsrin	260140	26,27,28	Hazano, Kelly camp, Ram Hamdan
	Sarmin	11278		
	Teftnaz	5195		
	Badama	56468	29	Salah Alden (Kherbet Eljoz) camp
	Darkosh	94435	30	Zarzur camp
	Janudiyeh	64651		
	Jisr-Ash-Shugur	92508	31,32	Meshmeshan and Konia, Western Marj Akhdar
	Afrin	175067	33,34	Afrin city, Basuta
	Bulbul	20119	35	Bulbul
	Jandairis	97636	36	Jandairis camp
	Mabtali	24438		
	Raju	44297	37	Raju
	Sharan	58322		
	Sheikh El-Hadid	12116		
	Al Bab	186767	38, 39, 40	Bazagha, Blue camp, Al Bab
	Arima	39663		
	Ar-Raee	22729		
	Rasm Haram El- Imam	12725		
	Tadaf	15627		
	Aghtrin	104997	41	Aghtrin
	Aleppo 18 clusters			

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Azaz	349031	42, 43, 44, 45	Kaljibrin, Yazbag camp, Catmeh camp , Azaz
Mare	47417	46	Mare
Suran - Aleppo	95145	47	Ehteimlat
Ghandorah	25007	48	Ghandorah
Jarablus	74404	49	Jarablus
Atareb	97964	50	Kafr Karmin Camp
Daret Azza	51117		

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