

# What's new in the workbook version 2?

## 1 The 3-year plan

The tool was revised, and a new module was added. The new module allows the generation of a 3-year plan (2020-2022) of the population estimates. The 3-year plan considers the endemicity level of each sub-district within the district to define its treatment plan for the 3 years. The population needing treatment is then estimated for each sub-district and then aggregated for the district or IU.

The estimation of the population considers the current WHO guidelines that recommend treatment annual treatment for high endemicity, treatment once every 2 years for moderate endemicity and treatment once every 3 years for low endemicity. However, the tool can be easily revised to fit any changes in the strategy in the future.

## 2 The reference year

21			
22	18. Language:	<input type="text" value="English"/>	
23			
24	19. Number of sub-districts:	<input type="text" value="515"/>	20. Reference year for the treatment triennial plan: <input type="text" value="2020"/>
25			<input type="button" value="Generate"/>
26			

On row 24 in the worksheet "Instructions", a new data entry is added to enter the reference year. Note that you can change the reference year beyond 2020, but this will oblige you to provide change the initial treatment plan in the worksheet "Endemicite\_JRSM" to match your reference year.

## 3 Treatment plan

The column "K" in the worksheet "Endemicite\_JRSM" is added and allows to provide the treatment plan for the reference year for the whole IU. This is obtained either from the JRSM 2020 if already submitted or from the historical data (latest JRSM and PC history).

	A	B	C	D	E	F	G	H	I	J	K
1											
2	<b>Endemicity Reported in the Most Recent JRSM</b>										2020
3	1	2	3	4	5	6	7	8	9	10	11
4	SN	Country	ISO2Code	Province	District	ESPEN_IU_ID	District ID	Year	Endemicity	Short description	Treatment Plan
5	1	Murkonkia	MK	South	Astori	1		2018	2	Moderate	0
6	2	Murkonkia	MK	South	Brodsi	2		2018	2	Moderate	0
7	3	Murkonkia	MK	South	Conichi	3		2018	2	Moderate	0
8	4	Murkonkia	MK	South	Druna	4		2018	2	Moderate	0
9	5	Murkonkia	MK	South	Elona	5		2018	3	High	1

The treatment plan for each sub-district is then generated in the column “O” of the worksheet “demo\_data” when the workbook is generated. At this stage, the treatment plan can be manually modified for any sub-district. The treatment plan once accepted here become the initial treatment plan.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2	<b>Demographic data by sub-IU</b>														
3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	SN	Country	ISO2	Admin_1	Admin_2 (IU)	ESPEN_IU_ID	Admin_3 (sub-IU, sub-district)	Year of population	Total Population	SAC Population	Adult Population	Percentage of SAC (%)	Percentage of adults (%)	Annual Population Growth Rate (%)	Treatment Plan
5	1	Murkonkia	MK	South	Astori		Ward-001	2019	96,979	19,396	63,036	20	65	2.50	0
6	2	Murkonkia	MK	South	Astori		Ward-002	2019	33,086	6,617	21,506	20	65	2.50	0
7	3	Murkonkia	MK	South	Astori		Ward-003	2019	11,770	2,354	7,651	20	65	2.50	0
8	4	Murkonkia	MK	South	Astori		Ward-004	2019	10,129	2,026	6,584	20	65	2.50	0
9	5	Murkonkia	MK	South	Brodsi		Ward-005	2019	1,212	242	788	20	65	2.50	0
10	6	Murkonkia	MK	South	Brodsi		Ward-006	2019	6,527	1,305	4,243	20	65	2.50	0
11	7	Murkonkia	MK	South	Brodsi		Ward-007	2019	27,876	5,575	18,119	20	65	2.50	0
12	8	Murkonkia	MK	South	Brodsi		Ward-008	2019	2,906	581	1,889	20	65	2.50	0

Note that the initial treatment plan must correspond to the reference year.

#### 4 The population natural growth rate

The 3-year plan uses the population NGR to estimates the population for each year. The column N in the worksheet “demo\_data” is added to provide the NGR.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2	<b>Demographic data by sub-IU</b>														
3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	SN	Country	ISO2	Admin_1	Admin_2 (IU)	ESPEN_IU_ID	Admin_3 (sub-IU, sub-district)	Year of population	Total Population	SAC Population	Adult Population	Percentage of SAC (%)	Percentage of adults (%)	Annual Population Growth Rate (%)	Treatment Plan
5	1	Murkonkia	MK	South	Astori		Ward-001	2019	96,979	19,396	63,036	20	65	2.50	0
6	2	Murkonkia	MK	South	Astori		Ward-002	2019	33,086	6,617	21,506	20	65	2.50	0
7	3	Murkonkia	MK	South	Astori		Ward-003	2019	11,770	2,354	7,651	20	65	2.50	0
8	4	Murkonkia	MK	South	Astori		Ward-004	2019	10,129	2,026	6,584	20	65	2.50	0
9	5	Murkonkia	MK	South	Brodsi		Ward-005	2019	1,212	242	788	20	65	2.50	0
10	6	Murkonkia	MK	South	Brodsi		Ward-006	2019	6,527	1,305	4,243	20	65	2.50	0
11	7	Murkonkia	MK	South	Brodsi		Ward-007	2019	27,876	5,575	18,119	20	65	2.50	0
12	8	Murkonkia	MK	South	Brodsi		Ward-008	2019	2,906	581	1,889	20	65	2.50	0

The NGR as provided in the new workbook is either the national average or the regional average. Wherever regional or district average are available, we used then and the countries in this case are Burkina Faso, Cameroon, Gabon, Guinea, Malawi, Tanzania (Mainland), Zambia.

It is highly recommended to use the regional od district average for better estimations of the population.

## 5 The three-year plan estimates

Additional columns are added in the worksheet “Sub\_District\_Summary” for the additional data related to the 3-year plan.

G	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
7	demicity	18	19	Generate the three-year plan				25	26	27	28	29	30	31	
		Population Requiring PC		Treatment Plan			Population Requiring PC								
							2020			2021			2022		
Admin_3 (sub-IU, sub-district)	Final Endemicity Category	SAC	Adults	2020	2021	2022	SAC (all)_2020	Adultes (not all)_2020	Total_2020	SAC (all)_2021	Adultes (not all)_2021	Total_2021	SAC (all)_2022	Adultes (not all)_2022	Total_2022
Ward-001	High	19,396	63,036	0	1	1	0	0	0	20,378	66,227	86,605	20,887	67,883	88,770
Ward-002	Moderate	6,617	4,301	0	1	0	0	0	0	6,952	4,519	11,471	0	0	0
Ward-003	Not endemic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ward-004	Moderate	2,026	1,317	0	1	0	0	0	0	2,129	1,384	3,513	0	0	0
Ward-005	Not endemic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ward-006	Moderate	1,305	849	0	1	0	0	0	0	1,371	892	2,263	0	0	0
Ward-007	Moderate	5,575	3,624	0	1	0	0	0	0	5,857	3,807	9,664	0	0	0
Ward-008	Not endemic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ward-009	Moderate	2,579	1,677	0	1	0	0	0	0	2,710	1,762	4,472	0	0	0

### 5.1 Action button

A new action button is added (red frame) to run the 3-years projections. It first generates the treatment plan (blue frame) and then calculates the populations to be treated (green frame).

### 5.2 Worksheet “Projections”

A new worksheet named “Projections” is added for the purpose to have a separate database for the projections. This can be copied/exported to another application for visualisation or for planning. The worksheet has a button that allows to generate the database.

	A	B	C	D	E	F	G	H	I	J	K	
1												
2	Treatment Projection of the three-year Plan							Generate Projections Database				
3	1	2	3	4	5	6	7	8	9	10	11	
4	SM	Country	ISO2	Admin_1	Admin_2 (IU)	ESPEN_IU_ID	Admin_3 (sub-IU, sub-district)	Year	Indicator	Description	Projections	
5	1	Murkonio	MK	South	Astori		Ward-001	2020	# of sub-units to treat	Total	0	
6	1	Murkonio	MK	South	Astori		Ward-001	2020	SAC Estimations	SAC	0	
7	1	Murkonio	MK	South	Astori		Ward-001	2020	Adult Estimations	Adults	0	
8	1	Murkonio	MK	South	Astori		Ward-001	2020	Total	Total	0	
9	1	Murkonio	MK	South	Astori		Ward-001	2021	# of sub-units to treat	Total	1	
10	1	Murkonio	MK	South	Astori		Ward-001	2021	SAC Estimations	SAC	20,378	
11	1	Murkonio	MK	South	Astori		Ward-001	2021	Adult Estimations	Adults	66,227	
12	1	Murkonio	MK	South	Astori		Ward-001	2021	Total	Total	86,605	
13	1	Murkonio	MK	South	Astori		Ward-001	2022	# of sub-units to treat	Total	1	
14	1	Murkonio	MK	South	Astori		Ward-001	2022	SAC Estimations	SAC	20,887	
15	1	Murkonio	MK	South	Astori		Ward-001	2022	Adult Estimations	Adults	67,883	
16	1	Murkonio	MK	South	Astori		Ward-001	2022	Total	Total	88,770	

The indicators included (column I) are: # of sub-units to treat, SAC Estimations, Adult Estimations, Total estimations.

### 5.3 Three-year plan report

Two pivot-table reports are added:

#### 5.3.1 Three-year Plan Projections by Sub-IU

The worksheet "9\_Proj\_IU" is a pivot-table of the projection estimates by sub-IU.

Three-year Plan Projections by Sub-IU															
Sum of Projections				Year	Indicator	Description	2020	2021	2021	2021	2021	2022	2022	2022	2022
				# of sub-units to treat	SAC Estimations	Adult Estimations	Total	# of sub-units to treat	SAC Estimations	Adult Estimations	Total	# of sub-units to treat	SAC Estimations	Adult Estimations	Total
Admin_1	Admin_2 (IU)	ESPEN_IU	Admin_3 (sub-IU, sub-district)	Total	SAC	Adults	Total	Total	SAC	Adults	Total	Total	SAC	Adults	Total
South	Astori		Ward-001	0	0	0	0	1	20,378	66,227	86,605	1	20,887	67,883	88,770
South	Astori		Ward-002	0	0	0	0	1	6,952	4,519	11,471	0	0	0	0
South	Astori		Ward-003	0	0	0	0	0	0	0	0	0	0	0	0
South	Astori		Ward-004	0	0	0	0	1	2,129	1,384	3,513	0	0	0	0
South	Brodsi		Ward-005	0	0	0	0	0	0	0	0	0	0	0	0
South	Brodsi		Ward-006	0	0	0	0	1	1,371	892	2,263	0	0	0	0
South	Brodsi		Ward-007	0	0	0	0	1	5,857	3,807	9,664	0	0	0	0
South	Brodsi		Ward-008	0	0	0	0	0	0	0	0	0	0	0	0
South	Conichi		Ward-009	0	0	0	0	1	2,710	1,762	4,472	0	0	0	0
South	Conichi		Ward-010	0	0	0	0	1	1,285	835	2,120	0	0	0	0
South	Conichi		Ward-011	0	0	0	0	1	10,029	0	10,029	0	0	0	0
South	Conichi		Ward-012	0	0	0	0	1	4,442	2,887	7,329	0	0	0	0
South	Druna		Ward-013	0	0	0	0	1	3,857	0	3,857	0	0	0	0
South	Druna		Ward-014	0	0	0	0	1	577	0	577	0	0	0	0
South	Druna		Ward-015	0	0	0	0	1	8,967	29,144	38,111	1	9,191	29,873	39,064

#### 5.3.2 Three-year Plan Projections by IU

The worksheet "10\_Proj\_IU" is a pivot-table of the projection estimates by IU.

Three-year Plan Projections by IU															
Sum of Projections				Year	Indicator	Description	2020	2021	2021	2021	2021	2022	2022	2022	2022
				# of sub-units to treat	SAC Estimations	Adult Estimations	Total	# of sub-units to treat	SAC Estimations	Adult Estimations	Total	# of sub-units to treat	SAC Estimations	Adult Estimations	Total
Admin_1	Admin_2 (IU)	ESPEN_IU		Total	SAC	Adults	Total	Total	SAC	Adults	Total	Total	SAC	Adults	Total
South	Astori			0	0	0	0	3	29,459	72,130	101,589	1	20,887	67,883	88,770
South	Brodsi			0	0	0	0	2	7,228	4,699	11,927	0	0	0	0
South	Conichi			0	0	0	0	4	18,466	5,484	23,950	0	0	0	0
South	Druna			0	0	0	0	4	54,728	56,006	110,734	1	9,191	29,873	39,064
South	Elona			4	33,247	55,192	88,439	3	13,239	43,027	56,266	4	34,931	57,986	92,917
South	Flora			3	61,367	111,755	173,122	2	28,332	92,079	120,411	3	64,474	117,412	181,886
West	Genthols			0	0	0	0	5	17,137	49,316	66,453	4	15,049	48,911	63,960
West	Hobbat			5	15,429	50,147	65,576	5	15,815	51,399	67,214	5	15,211	52,684	68,895
West	Hilato			5	9,604	25,995	35,599	4	7,788	25,308	33,096	5	10,089	27,312	37,401
West	Jenna			0	0	0	0	1	8,313	0	8,313	0	0	0	0
North	Kora			5	11,317	36,782	48,099	5	11,601	37,700	49,301	5	11,891	38,643	50,534
North	Lusson			4	12,377	30,834	43,211	3	8,983	29,197	38,180	4	13,005	32,394	45,399
North	Michen			0	0	0	0	3	3,388	2,203	5,591	0	0	0	0
North	Nursed			0	0	0	0	5	35,847	79,891	115,738	2	23,765	77,237	101,002
North	Oparuril			4	21,622	70,269	91,891	4	22,163	72,026	94,189	4	22,718	73,827	96,545
North	Pravda			2	1,322	4,295	5,617	2	1,355	4,402	5,757	2	1,389	4,512	5,901
North	Rustshal			5	23,057	64,290	87,347	4	19,437	63,170	82,607	5	24,224	67,545	91,769
East	Sotru			0	0	0	0	4	2,497	4,153	6,650	2	998	3,241	4,239
East	Tribusep			0	0	0	0	4	22,351	1,217	23,568	0	0	0	0
East	Utro			0	0	0	0	3	6,141	13,698	19,839	2	3,827	12,437	16,264
East	Vesstrik			4	51,663	167,908	219,571	4	52,955	172,106	225,061	4	54,278	176,409	230,687
East	Wojtik			5	8,735	28,389	37,124	5	8,954	29,099	38,053	5	9,178	29,825	39,003
East	Xanad			0	0	0	0	5	25,021	13,220	38,241	0	0	0	0
East	Yanduka			5	19,939	63,708	83,647	4	20,007	65,021	85,028	5	20,948	66,931	87,879
East	Zemelya			0	0	0	0	5	38,196	21,105	59,301	2	5,880	19,110	24,990
<b>Total</b>				<b>51</b>	<b>269,679</b>	<b>709,564</b>	<b>979,243</b>	<b>93</b>	<b>479,401</b>	<b>1,007,656</b>	<b>1,487,057</b>	<b>65</b>	<b>362,933</b>	<b>1,004,172</b>	<b>1,367,105</b>

## 6 Update of JRSM

The table above contains the population requiring PC in every IU per year. These values can be used to fill in or update JRSM.

### 6.1 Worksheet "COUNTRY\_INFO"

In the worksheet "country\_info", replace the in the column "O" population requiring PC for schisto with the total estimates of the above report. In column "S" number of treatment rounds planned, enter 1 for any district where population requiring PC is not null, unless for programmatic reason if the treatment cannot be carried out, enter zero.

### 6.2 Worksheet "PZQ"

In column "J" SAC at lower level, copy and paste the SAC estimates from the worksheet "10\_Proj\_IU".

In column "K" Adults, copy and paste the adult estimates from the worksheet "10\_Proj\_IU".