Tool for Assessing Statistical Capacity -TASC 2.1-Digital Package

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The TASC 2.1-Digital Package

Introduction

The Tool for Assessing Statistical Capacity or TASC 2.1-digital package is an improved, online version of the TASC 2.1paper based tool. It is designed to reduce the burden on the Administrator when compiling results, as well as eliminate the use of paper. However, to use the TASC 2.1-digital package, the Administrator and participants *must* have an internet connection and the Administrator requires a Google account. This is because the data compiled is stored in the Administrator's Google Drive. Please note, TASC does not collect any personally identifiable information.

The package consists of three files:

- TASC 2.1-Digital Original Form: The purpose of this form is to act as a template for Administrators to copy and send out to their management and staff. Once sent, experts will individually fill out each module for which they identify as an "expert". A second copy of this form will be created and used to answer the group section of the TASC. This form replaces the paper and PDF versions of the TASC answer sheet from the manual version.
- **TASC 2.1-Digital Original Sheet**: The purpose of this sheet is to collect and transpose the answers from the form, above, so that they can be copied and pasted into the TASC Results Calculator, detailed below.
- **TASC 2.1-Digital Results Calculator**: The purpose of the Results Calculator is to aggregate NSO individual and group answers to inform NSO staff, managers, and international partners of the NSOs current statistical capacity.

This document is for Administrators only, not participants who will be answering the TASC. All Administrators should also read the TASC Administrator's Manual and watch the videos to understand the purpose, method of TASC administration, and the interpretation of results.

Steps to Use TASC 2.1-Digital

This section is organized into three subsections: Before, During, and After. "Before" describes each of the steps the TASC Administrator must complete to prepare the Google Form and Sheet for participants. "During" refers to the TASC 2.1-digital administration utilizing the TASC Administrator's Manual, and the Google Form. "After" describes the work Administrators must complete to transfer answers from the Google Sheet to the TASC Calculator for scoring.

Before:

IMPORTANT: The steps in this section must be completed **twice**: once to build a Google Sheet and Google Form for Individual Responses and second Google Sheet and Google Form to store Group Responses. Therefore, the Administrator must create two spreadsheets and two forms before administering the TASC.

1. To use TASC 2.1-digital, you must have a Google account. Google accounts are free to create. Click on <u>this</u> link to sign up for a Google account; you should see a screen similar to the image below when you click on the link.

| Create your (| Google Account | |
|--------------------------|------------------------------------|----------------------------|
| First name | Last name | |
| Example | Account | |
| Username | | |
| TASC2.1.digital | @gmail.com | |
| You can use letters, num | bers & periods | |
| Available: examplea17 | 75 | 029 |
| Jse my current email | address instead | |
| | | One account. All of Google |
| Password | Confirm | working for you. |
| | s with a mix of letters, numbers & | |

This Google account will enable you to save all TASC-related forms and sheets to your personal Google Drive. This drive is a cloud storage and file sharing platform that allows you to create, save, and edit content on the web.

2. Once you have created a Google account, click on "<u>TASC Original Sheet</u>" to make a copy. When you click on this link, you will see the screen below populate in your browser. Click on the blue "Make a copy" button, as highlighted in red below.



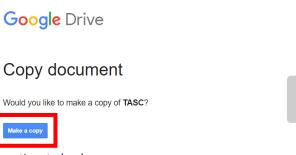
Rename the document from "Copy of TASC Original Sheet - RENAME ONLY" to "TASC [Name of organization] Individual" where [Name of organization] is the name of the country or NSO this TASC is being conducted for (e.g., for Malawi, we would name this sheet "TASC Malawi Individual Sheet"). You can rename a file in the Google environment by clicking inside the box highlighted in red, below, and typing your desired name.

| | Copy of TASC C | Driginal Sheet - REN nsert Format Data | IAME ONLY | | ids ago | | | Share |
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| 1 | Timestamp | Are you answering as an | Which department do voi | What is your position in t | L How many years have ye | Are you an expert in Insti | 1 1 Law exists that create | 12 Jaw e |
| 2 | 7/25/2022 16:23:28 | , , | | | Between 3 and 6 years | | The law exists and is follo | |
| 3 | 8/3/2022 8:44:30 | | | Head of dissemination | Between 6 and 9 years | Yes | The law does not exist bu | |
| 4 | 8/3/2022 9:50:50 | Individual | Publicity | Head of Publicity | More than 10 years | Yes | The law exists but is not | Law exist |
| 5 | 8/3/2022 10:20:08 | Individual | Government Relations | Head of Government Rel | Less than 1 year | Yes | The law does not exist an | There is r |
| 6 | 8/5/2022 10:22:14 | Individual | | | Between 1 and 3 years | Yes | The law does not exist bu | Law exist |

Note: Upon opening the Google Sheet, you will see the content of the first tab, Example_Responses. This content, see yellow box above, consists of dummy data that will be overwritten by your expert's own responses. Click on the third tab, Institutional_Capacity. Notice the red #N/A values in many of the cells, see red box, below. Always ignore these red #N/A values. They simply mean the sheet is waiting for participants to fill the form out.

| | А | В | С | D | E | F | G | Н | I |
|---|---|-----|-----|-----|-----|------|------|------|------|
| 1 | Are you an expert in Institutional Capacity? | Yes | Yes | Yes | Yes | Yes | | | |
| 2 | 1.1 Law exists that creates and mandates a | 3 | 2 | 1 | 0 | 2 | #N/A | #N/A | #N/A |
| 3 | 1.2 Law exists that mandates collection of cer | 3 | 2 | 1 | 0 | 1 | #N/A | #N/A | #N/A |
| 4 | 1.3 Law exists that specifies that respondents | 3 | 2 | 1 | 0 | 1 | #N/A | #N/A | #N/A |
| 5 | 1.4 Procedures exist to report political or adm | 3 | 2 | 1 | 0 | 2 | #N/A | #N/A | #N/A |
| 6 | 1.5 Law exists that mandates respondent part | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A | #N/A |
| 7 | 1.6 Current legislation specifies the following | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A | #N/A |
| 8 | 1.7 Decisions on all steps of data collection a | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A | #N/A |
| 9 | 1.8 The country has implemented a statistical | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A | #N/A |

3. Next, click on "<u>TASC Original Form</u>" to make a copy. When you click on this link, you will see the screen below populate in your browser. Click on the blue "Make a copy" button as highlighted in red below.



Note: This can take some time to load.

Rename the document to "TASC [Name of organization] Individual Form" (e.g., for Malawi, we would name this form "TASC Malawi Individual Form"). Again, you can rename a file in the Google environment by clicking inside the box highlighted in red, below, and typing your desired name.

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| | Questions Responses Settings | | | | | | |
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| | TASC | | × | : | Ð | | |
| | IASC | | ^ | • | Tr | | |
| | Form description | | | | - | | |
| | | | | | | | |
| | Are you answering as an individual or as a group? | | | | | | |
| | O Individual | | | | | | |
| | ⊖ Group | | | | | | |
| | After section 1 Continue to next section | | | | | | |

4. In the newly created form, click on the Responses tab. To create a spreadsheet, click on the green and white Sheets icon in the top panel.

| Responses | Settings | |
|-----------|----------|---------------------|
| | | |
| | | |
| | | Accepting responses |

Click on "Select existing spreadsheet", then, "Select", and then click on the newly created sheet from Step 1 and click "Select". This connects the new form with the new sheets. A new, linked and empty sheet will populate in your browser. The contents of this sheet are highlighted in yellow, below. Close the first sheet with the same name and example data, highlighted in red to avoid confusion.

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| ▦ | TASC Malawi Individual Sheet Image: Comparison of the second | | | | | | | | | | | | |
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| | A | В | С | D | E | F | G | | Н | | | | |
| 1 | Timestamp | Are you answering as an | Which department do you WI | nat is your position in th | ow many years have y | Are you an expert in Inst | i 1.1 Law exists t | hat create 1.2 | Law exists | s tha | | | |
| 2 | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | |
| 3 4 | | | | | | | | | | | | | |

5. In the newly created Sheet, there will be a tab, called "Form Responses 2", that pulls data from the linked form. Rename it to "Responses_Individual_[Name of organization]" (e.g., "Responses_Individual_Malawi") by clicking on the arrow next to the tab name, and then clicking "Rename" from the pop-up highlighted in red, below. DO NOT forget the underscore ("_").

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| Timest | amp Are you answering | as an Which department do yo | What is your position in | n ti How many years have y | c Are you an expert in Ins | i 1.1 Law exists that create | 1.2 Law exists |
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6. Click on the "Transposed_Responses" tab. In cell B1, enter the name of the tab created in step 4 (e.g., "Responses_Individual_Malawi"). Ensure that what you type in cell B1 exactly matches (i.e., case, spelling, etc.) the name of the tab created in step 4. If the name does not match, your sheet will not recognize which tab of information it is meant to transpose.

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|----|--|----------------------|-------------------|-----------------------|----------------------|-----------|
| 32 | \bullet fx | | | | | |
| | A | В | С | D | E | |
| 1 | Enter Form Responses name here: | Responses_Indiv | vidual_Malawi | | | |
| 2 | Timestamp | | | | | |
| 3 | Are you answering as an individual or as a group? | | | | | |
| 4 | Which department do you work in? | | | | | |
| 5 | What is your position in the department? | | | | | |
| 6 | How many years have you worked at the National Statis | tical Office? | | | | |
| 7 | Are you an expert in Institutional Capacity? | | | | | |
| 8 | 1.1 Law exists that creates and mandates a National Sta | atistical System (N | SS), and it nam | es the National Sta | atistical Office (N | SO) as |
| 9 | 1.2 Law exists that mandates collection of census at defi | ined intervals of 5- | 10 years | | | |
| 10 | 1.3 Law exists that specifies that respondents' data will be | oe kept confidentia | I and used for s | tatistical purposes | only | |
| 11 | 1.4 Procedures exist to report political or administrative | pressure when pro | ducing and diss | eminating statistic | al information | |
| 12 | 1.5 Law exists that mandates respondent participation in | censuses | | | | |
| 13 | 1.6 Current legislation specifies the following concerning | the head of the N | SO: the selection | n process, job req | uirements, term | limits, a |
| 14 | 1.7 Decisions on all steps of data collection and dissemi | nation are made ir | ndependently fro | m political influence | ce | |
| 15 | 1.8 The country has implemented a statistical code of go | ood practice, follow | ing internationa | l standards and ad | dapted to the loca | al conte |
| 16 | 1.9 Data confidentiality training exists and covers: the ro | le of the public's c | ooperation and | trust, prohibition of | f browsing data v | vithout |
| 17 | 1.10 Training concerning ethics in statistics exists and co | overs the importan | ce of producing | and disseminating | g reliable statistic | s |
| 18 | 1.11 All staff are trained on data confidentiality within 60 | days of their hire a | and regularly the | ereafter (every yea | r or two) | |
| 19 | 1.12 NSO has an appropriate group (such as a Data Rev | view Board) that e | nforces confider | ntiality and reviews | quidelines at lea | ast onc |

Give Google Sheets a few seconds to load and refresh the page if you do not see any changes; at this point, the sheet should be connected to the form. Now, if a participant fills out the form you created in Step 3 this sheet will populate with their answers.

7. For participants to receive and fill out with digital form, you must create a URL for them to access. Go to the form created in step 3. Click on the Send button in the top right corner.

| | TASC Malawi Individua | al Form 🛅 ☆ | | | | 5 | \odot | 0 | 5 | ¢ | Send | |
|-------|-----------------------|----------------------------|------------|-----------|------------|----------|----------|---|---|---|------|--|
| I | | | Questions | Responses | Settings | | | | | | | |
| | | 0 responses | | | | Acceptin | g respon | _ | : | | | |
| Click | the link icon. Then | click Shorten URL. Click t | the Copy b | outton to | copy the U | RL. | | | | | | |
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| Link | | 9 |
| https://forms.gle/RARRPzdS1RPM4MMy8 | | |
| Shorten URL | Cancel | ору |
| | | |

Once you have created this link, send the URL out to all participants or to the main point of contact at the NSO for distribution.

 Repeat Steps 1 to 7 again to collect group responses with the following changes: the sheet is named "TASC [Name of organization] Group Sheet" and the form is named "TASC [Name of Organization] Group Form". This form and sheet should also be linked.

During:

 Teach the NSO how to use TASC and fill it out correctly. Administrators should refer to the TASC Administrator's Manual to understand its structure, administration, scoring, and results interpretation. Participants will access the Google Form to fill out TASC. Ensure users *only* fill out the census operation modules they are an expert on.

After:

- 10. Download a new copy of TASC2.1-Digital_Results-Calculator.xlsx.
- 11. Open the sheet (e.g., "TASC Malawi Individual Sheet") again. The spreadsheet should now be populated with answers across all the subject tabs from the forms filled out by NSO experts.
- 12. To calculate results using TASC 2.1-digital, simply copy and paste the mapped numbers in each tab in the spreadsheet (e.g., "Institutional Capacity", "Mapping", "Sampling") into the corresponding tab in the Excel file downloaded in Step 10. The mapped numbers are highlighted in blue in the following picture.

| A | В | С | υ | E | F | G | Н |
|---|-----|-----|-----|-----|------|------|------|
| Are you an expert in Census / Survey Planning and Mana | Ves | Vec | Ves | Vec | No | | |
| 2.1 National Statistical Office (NSO) has permanent staff | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.2 Plans for each census include detailed physical space | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.3 Plans for major surveys include detailed physical spa | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.4 Plans for each census include estimates of staffing n | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.5 Plans for major surveys include estimates of staffing | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.6 NSO has an established hierarchical structure and a | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.7 If mobile data capture is used, a multi-disciplinary wo | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.8 If mobile data capture is under consideration or in use | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.9 If mobile data capture is being considered, a multi-dis | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.10 The publicity campaign for each census involves loo | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |
| 2.11 Project budgets are divided into major operations, s | 3 | 2 | 1 | 0 | #N/A | #N/A | #N/A |

- 13. Delete any columns with N/A values from the TASC2.1-Digital_Results-Calculator.xlsx file.
- 14. Use the results from the "Summary of Scores" and "Table-" and "-Chart" Tabs to assess the statistical capacity of the organization.

Understanding TASC 2.1-Digital (No action required)

When a form is submitted by a participant, a new row in the Responses tab (e.g., "Responses_Individual_Malawi") populates with all corresponding data entered by the participant in the form. To be clear, no one individual should be answering every question in the TASC because respondents are only meant to respond to census operational sections in which they are an *expert*.

You can see dummy data in the responses tab, which pulls data from the linked Google Form, below. Each row is one observation, or one respondent. Each column populated by an answer in that row represents their answer to one of the questions posed in the TASC.

| A1 | \bullet f_X Times | amp | | | | | | |
|----|-----------------------|-------------------------|-------------------------|------------------------------|------------------------|----------------------------|--|----------------------------|
| | A | В | С | D | E | F | G | н |
| 1 | Timestamp | Are you answering as an | Which department do you | What is your position in the | How many years have ye | Are you an expert in Insti | 1.1 Law exists that create | 1.2 Law exists that mand |
| 2 | 7/25/2022 16:23:28 | Individual | Human Resources | Head of HR | Between 3 and 6 years | Yes | The law exists and is follo | Law exists and censuses |
| 3 | 8/3/2022 8:44:30 | Individual | Dissemination | Head of dissemination | Between 6 and 9 years | Yes | The law does not exist bu | Law exists but the timelin |
| 4 | 8/3/2022 9:50:50 | Individual | Publicity | Head of Publicity | More than 10 years | Yes | The law exists but is not | Law exists but does not c |
| 5 | 8/3/2022 10:20:08 | Individual | Government Relations | Head of Government Rel | Less than 1 year | Yes | The law does not exist an | There is no such law |
| 6 | 0/5/0000 40:00:44 | the attribution of the | | | D-4 | V | The state of the second second second second | 1 a a a. a. a a a a a a a |

This data is ingested and transposed (i.e., rows become columns and vice versa) in the Transposed_Responses tab of the sheet. In cell B1 of this tab, we write the *exact* name of the tab where the Responses are being stored (e.g., "Responses_Individual_Malawi"). Using the formula =transpose(INDIRECT(B1 & "!A:JR")), we take whatever value is stored in cell B1 and transpose the columns from A to JR (i.e., all the questions, each represented by their own column; see image, above) so the rows (i.e., observations of users entering responses) become columns (see image, below).

| | А | В | С | D | E | F |
|---|---|---------------------|---------------------|---------------------|--------------------|--------------|
| | Enter Form Responses name here: | Responses | | | | |
| ! | Timestamp | 7/25/2022 16:23 | 8/3/2022 8:44:30 | 8/3/2022 9:50:50 | 8/3/2022 10:20:0 | 8/5/2022 1 |
| 1 | Are you answering as an individual or as a group? | Individual | Individual | Individual | Individual | Individual |
| ŀ | Which department do you work in? | Human Resourc | Dissemination | Publicity | Government Rel | ations |
| j | What is your position in the department? | Head of HR | Head of dissemi | Head of Publicity | Head of Governme | ment Relatio |
|) | How many years have you worked at the National Statist | Between 3 and 6 | Between 6 and 9 | More than 10 ye | Less than 1 year | Between 1 |
| | Are you an expert in Institutional Capacity? | Yes | Yes | Yes | Yes | Yes |
| 3 | 1.1 Law exists that creates and mandates a National Stat | The law exists a | The law does no | The law exists b | The law does no | The law dc |
|) | 1.2 Law exists that mandates collection of census at defin | Law exists and c | Law exists but th | Law exists but d | There is no such | Law exists |
| 0 | 1.3 Law exists that specifies that respondents' data will b | Law addressing | Law addressing | Law exists but is | There is no such | Law exists |
| 1 | 1.4 Procedures exist to report political or administrative p | Procedures exist | Procedures exist | Procedures exist | The are no such | Procedure |
| 2 | 1.5 Law exists that mandates respondent participation in | Law exists and is | Law exists but is | Law exists but is | There is no such | law |
| 3 | 1.6 Current legislation specifies the following concerning | The legislation e | The legislation e | The legislation e | The legislation d | oes NOT e: |
| 4 | 1.7 Decisions on all steps of data collection and dissemin | NSO makes all c | NSO makes all o | NSO often faces | Data collection a | ind dissemi |
| 5 | 1.8 The country has implemented a statistical code of go | Yes, and it is foll | Yes, but it is only | Yes, but it is only | A statistical code | e of good pr |
| 6 | 1.9 Data confidentiality training exists and covers: the role | Training program | Training program | Training program | Training program | n does not e |
| 7 | 1.10 Training concerning ethics in statistics exists and co | Training exists a | Training exists b | Training does no | Training does no | t exist and |
| 8 | 1.11 All staff are trained on data confidentiality within 60 of | All staff are train | Only staff directly | Staff directly har | No training on da | ata confider |

This step transforms the Google Forms data into a format the Results Calculator (TASC2.1-Digital_Results-Calculator.xlsx) can understand, allowing summary operations (e.g., scoring for NSO capacity results) to occur.

Mapping from character-based to code-based answers

In each tab, the text-based answers from the Google Form are mapped to a numbered output from 0 to 3 (i.e., one code for each corresponding answer provided) using the formula below:

=HLOOKUP(Cell_to_map,Lookup_table,Which_Row_To_Use,Exact_or_Approx)

This mapping step is necessary for respondent answers to be readable by the results calculator.

Below is an example of this formula as it is used in cell B2 in the "Census / Survey P & M" tab:

=HLOOKUP(Transposed_Responses!B49,\$C\$31:\$F\$32,2,0)

This formula states: use the lookup table at C^{31} ; F^{32} and map the value in Transposed_Responses!B49 to the correct number from the lookup table. We use the 2nd row (hence we have 2) and we want an EXACT match, therefore we place 0 at the end.

Note: the \$ signs in \$C\$31:\$F\$32 mean these are *absolute* references and so they will not change for other values in the same row. Otherwise, these references would change for different form responses.