PARTNERSHIPS

TolaDataCASE STUDY

The Sino-German Agricultural Centre

Results monitoring and donor reporting for a bilateral ministerial project in China

NOVEMBER 2023

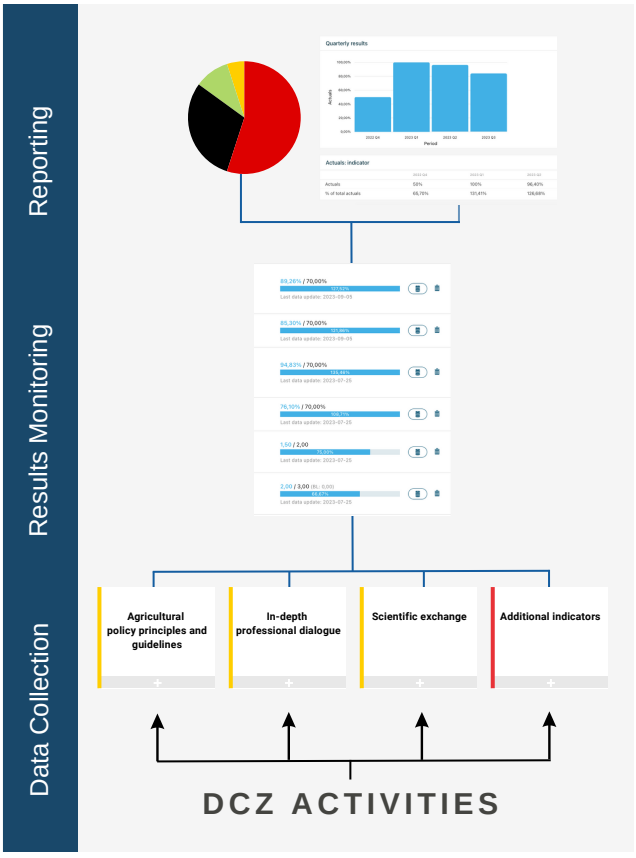
SUMMARY

CLIENT	THE SINO-GERMAN AGRICULTURAL CENTRE (DCZ)
SECTORS	PARTNERSHIPS & AGRI-FOOD
DURATION	2022-2025
REGION	THE PEOPLE'S REPUBLIC OF CHINA

GOVT. PARTNERS

GERMAN FEDERAL MINISTRY OF FOOD & AGRICULTURE

CHINESE MINISTRY OF AGRICULTURE & RURAL AFFAIRS



TolaData CASE STUDY

Results Monitoring and Donor Reporting for a Bilateral Ministerial Project in China

Established in 2015, the Sino-German Agricultural Centre (DCZ) serves as a hub to further technical and political exchange on agri-sector cooperation between the German and Chinese agriculture ministries. The DCZ plays a core role in the bilateral relationship between the two countries, and is cited in the German government's new 'Strategy on China' as a key platform to conduct dialogue on topics of strategic interest.

Now in Phase III of the initiative (2022-25), the DCZ project employs a blend of information products and visibility-focused activities designed to promote a range of science and policy interests for German and Chinese stakeholders. The Sino-German Agricultural Week, held annually, is the DCZ flagship event that brings together high-level speakers and participants for bilateral knowledge sharing in agriculture.

TolaData was selected to facilitate indicator management, results monitoring and stakeholder reporting for the joint-ministerial project. The platform enables the DCZ team to store, manage and analyse project data in a centralised hub, thereby improving data quality and reliability, streamlining the M&E and impact measurement processes, and enhancing their communication and learning from results.

Through simplified and interactive reporting, TolaData has enabled the team to showcase project achievements and challenges in a transparent and engaging way, with the goal of fostering agricultural knowledge exchange and collaboration between German and Chinese counterparts through data-driven insights and learnings.

With support from
Federal Ministry of Food and Agriculture
by decision of the German Bundestag
DCZ 中德农业中心 Deutsch-Chinesisches AGRARZENTRUM

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OPERATIONAL CONTEXT

Strategies and Challenges in Chinese Food Security

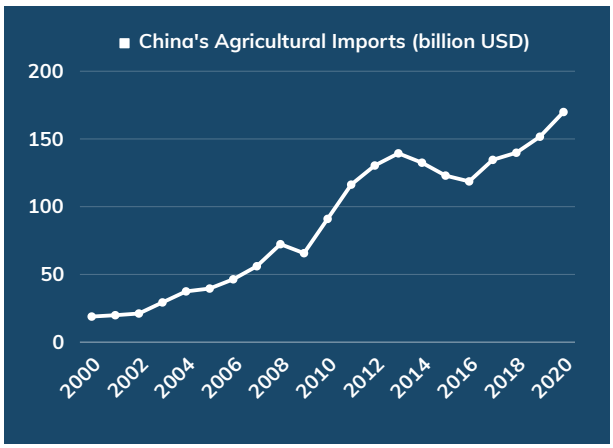
China is the world's largest producer, importer *and* consumer of agricultural products. As a nation of 1.4 billion people with growing demand for food, China is reliant on international trade due to its limited access to arable land.

But in light of multiple domestic and global challenges that have disrupted the production and trade of agricultural products, agricultural self-sufficiency is currently viewed by China as a strategic imperative, with the aim to increase domestic grain production by another 50 million tons and to promote the creation of high-quality farmland to bolster food security. While home to vast and diverse natural landscapes, China's limited agricultural land relative to its colossal population poses a serious challenge in pursuing sustainable agricultural production. To overcome this, the government is positioning rural revitalisation, agricultural digitalisation and green agriculture as top agenda items for the coming years.

'No Room for Error': Designing a Modern Agriculture Strategy for China

The government's annual white paper known as the *No. 1 Document,* which sets the tone and direction for the country's agricultural development, has been largely devoted to agricultural and rural issues since 2004 (see a DCZ policy brief here).

Within the current scope of domestic challenges – broadly defined by scarce natural resources, environmental degradation and a declining rural population – the Chinese government is undertaking a transformation of the country's agricultural development model. In announcing its latest No. 1 Document for 2023, the government stressed that addressing these issues would be a "top priority", adding there would be "no room for error". The solution will foreground sectoral innovation, digitalisation, as well as amplifying the potential of science and technology to provide a more sustainable approach to national agriculture.



China is more reliant than ever on foreign agriculture. Imports have surged in the 21st Century, increasing almost tenfold in dollar value in the last two decades. Source: Chatham House, ResourceTrade.Earth

Cooperation as Key to Development

The Chinese government views strengthening strategic partnerships as a fundamental pillar for successfully meeting its own development priorities. This is reflected in the steady increase in the scale of its international activities in Asian and African countries and its cooperation with European partners on numerous global development issues. China has also signed MoUs with the EU to support collaborative research projects under two flagship initiatives on food security and climate change. Meanwhile, bilateral ties between China and Germany have produced multiple tracks for long-term cooperation programmes, including joint-initiatives on Research and Development, climate action and bilateral policy. In mid-2023 Germany released its 'Strategy on China', marking a new period in Berlin's ties with its Chinese partners for the years to come. While denoting China as a rival and competitor in specific domains, the strategy emphasises the importance of China as a partner for the protection of global goods, like climate and biodiversity, as well as for implementing the 2030 Agenda for Sustainable Development.

> *The most challenging and arduous tasks we face in building a modern socialist China in all respects remain in our rural areas.* ***We will continue to put agricultural and rural development first.***
>
> CHINESE PRESIDENT XI JINPING, 2022

THE ORGANISATION

Bilateral Cooperation Programme (BCP)

For the past 30 years the Bilateral Cooperation Programme (BCP) – a global initiative funded by the German Federal Ministry of Food and Agriculture (BMEL) – has supported partner countries in developing their own agri-food industries, expanding sustainable agriculture and improving agricultural knowledge and innovation systems in order to ensure adequate self-sufficiency and global food supply. With bilateral cooperation in line with UN Sustainable Development Goal 17 on 'Partnerships', legal, scientific, technical and social challenges in agricultural and food policy are addressed. The programme includes agricultural initiatives across Africa, Europe, Asia and South America, with projects of the BCP currently under the supervision of GFA Consulting Group GmbH.

DCZ: The Sino-German Agricultural Centre

Over the past eight years, the Sino-German Agricultural Centre (DCZ), a project of the BCP in China, has played a crucial role in achieving partnership aims and is explicitly mentioned in the new Strategy on China as a platform through which to conduct bilateral dialogue on topics of strategic importance. Currently in its third phase as of 2022, the DCZ operates as a central contact and information platform for the bilateral cooperation between Germany and China in the agriculture and food sectors.

The DCZ brings together political stakeholders, scientists and business experts from both countries and engages in multiple exchange measures for representatives of the Chinese Ministry of Agriculture and Rural Affairs (MARA) and other institutions. The project's local presence enables stakeholders from both sides to access expert knowledge and experience on the ground, and promotes exchanges on topics such as environmentally sound, sustainable agriculture and its contribution to climate protection and adaptation, rural development and food security through a range of forums and events.

The DCZ also supports the implementation of multiple Sino-German bilateral cooperation projects that aim to showcase the best practices and technologies from Germany and China in different fields of agriculture, such as crop production, animal breeding and agricultural education. It also collaborates with the Department of International Cooperation at the Chinese Academy of Agricultural Sciences to establish a science and tech platform for promoting research and innovation in agricultural sciences between both countries.

The Sino-German Agricultural Week

An annual flagship event, the Sino-German Agricultural Week invites a large number of high-ranking speakers and stakeholders for a schedule of comprehensive presentations and panel discussions on various aspects of Sino-German cooperation in agriculture. Now in its ninth year, the event comprises a series of forums, seminars, workshops and field visits on a range of themes, including digital solutions, ecological farming practices, food loss and waste reduction, animal breeding and husbandry, crop production and agricultural technology.

Guided by an annual theme reflecting the current and future issues of common interest, the 2023 event was held in Bengbu City and focused on 'The Future of Agri-food Systems', tackling issues related to digital, green and circular innovation.

Participants attend the 9th Sino-German Agricultural Week, November 2023. Click here for more info.

THE CHALLENGE

As a joint-project of the German and Chinese ministries, the DCZ project is accountable to two of the largest donor countries in the international development space. Ensuring reliable monitoring and reporting at this level is therefore crucial to maintaining the support of major stakeholders, both government or local-level actors.

Broadly described, Phase III of the DCZ initiative (2022-25) relies on a blend of information products designed to promote a range of science and policy interests for German and Chinese stakeholders (representatives from politics, business and science) and visibility-focused activities, such as active public engagement (through in-person forums, events and online platforms and social channels) to assist in the dissemination of this information. As such, the projects activities can be grouped into key initiatives as per the project results framework:

Outputs: DCZ Activities & Products					
Project steering meetings	Events (e.g. flagship events, conferences, workshops, seminars and other forums)	Publications (studies, analyses, policy briefs, law monitoring, articles)	Innovative policy principles, guidelines and recommend-ation	Public outreach and visibility (website, social media, newsletter professional journals)	DCZ info platform for agricultural research institutes

Project output activities and products routinely monitored by the DCZ team.

To meet the data collection needs for monitoring the scope of activities, DCZ and implementing partners worked to devise a thorough framework for tracking activity results. The associated monitoring plan consists of 42 operationalised indicators that are collected using one or more methodological instruments, as seen below.

28	3	9	4
Number analysis	Text analysis	Online Survey	Collection of statements

Number of indicators as measured by each monitoring instrument.

Due to a pronounced messaging and public relations focus, the programme design of the DCZ is relatively atypical to the agricultural sector, requiring a number of innovative and non-traditional approaches more closely aligned with public outreach impact measurement. Many of the activities within the DCZ results framework are social in nature, either in-person or online, and involve tracking attendance, visits and interactions from key stakeholder groups. A broad list of data sources includes:

Web Analytics	Events	Media Monitoring	Feedback
• Matomo • YouTube • Mailchimp • LinkedIn	• Participant lists (on-site) • Participant lists (online/Zoom) • Participants lists (research institutions) • Representatives lists (BMEL/MARA)	• Chinese media sources • Online coverage • Print coverage	• Stakeholder emails • Social media comments • Statements by participants (oral, email, etc.)

Data sources for monitoring the DCZ results.

As such, the DCZ employs an elaborate monitoring process leveraging a variety of sources including a mix of online surveys, media monitoring, and social analytics tools to link project activities to their associated outputs, outcomes and overall impact. An example of the indicators as related to monitoring DCZ visibility is depicted below:

Outcome	Operationalized indicators	Instrument	Data Source	Time of data collection
The visibility of the DCZ has increased	The number of visits to the DCZ website is trending upwards		Matomo	Once a month
	The number of followers on LinkedIn is increasing		LinkedIn admin tool	Once a month
	The number of people that receive the DCZ News Digest is increasing		Mailchimp	Once a month
	Number of attendants at DCZ events		Event participant lists (on-site and online)	At the end of each event
	The number of articles in German / Chinese news media mentioning DCZ is increasing		Coverage in media (online and offline)	Continuously
	The number of views of the DCZ YouTube channel is increasing		YouTube analytics	Once a month

A sample of a results model output and affiliated operationalised indicators.

In order to enable the reliable and routine results monitoring for reporting and steering on the bilateral project, the DCZ team opted to integrate a digital tool to support the complete data cycle from collection to monitoring, and onwards to visualisation. To achieve this, the tool would need to provide the following three key functions:

A system for structuring the collection of data:

The project's results framework would need to be adapted into the digital M&E system, providing a visual description of the intended short-, medium- and longer-term results. The M&E tool should enable the DCZ team to define clear and relevant indicators for each level of the project's results chain, as well as to plan and implement data collection methods and tools that are appropriate for each indicator.

Furthermore, due to the diversity of programme data from surveys to website visits, the M&E tool should also provide the DCZ team with the means to link the collected data from different sources and formats to the respective indicators, and to keep track of the data sources and provide notes on quality. This includes through hyperlink or direct file upload.

A clear overview for the results-based measurement of project goals:

The M&E tool should enable the team to aggregate and disaggregate the data collected from different activities, and to analyse and visualise the data in relation to the project's goals and objectives. The M&E tool should also allow the DCZ team to compare the actual results with the expected results, and to identify any gaps, challenges or opportunities for improvement through clear data analysis and visualisation.

A tool to supplement and simplify the reporting of results to stakeholders:

As a bilateral programme implemented by the governments of Germany and China, stakeholder reporting remains vital to the continuation of support to the project. The digital M&E system should enable the team to communicate and report the results of the project to a range of high-level stakeholders, such as the German BMEL and the Chinese MARA. The M&E system should also allow the team input data following collection in China, for review by implementing partners, to generate reports that are tailored to the needs and preferences of different audiences, such as policy makers, practitioners, researchers or donors.

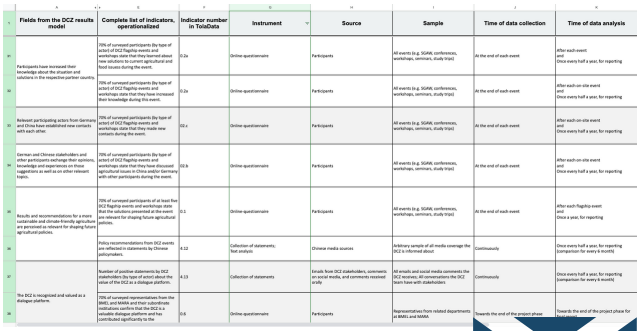
THE SOLUTION

Illustrating the Data Journey:

From the commencement of Phase III of the DCZ initiative, TolaData was chosen by project implementers as a central hub for end-to-end results monitoring and reporting. TolaData offers M&E professionals a structured workflow from project design to tracking implementation and analysis. In order to illustrate the process, below we will track data generated by a single activity up the results pipeline as it passes every stage of the data cycle, before being represented in context inside the dashboard.

Structuring Data Collection:

In order to track progress towards the outcome of knowledge sharing that is central to the DCZ project, a number of indicators were defined to assess the degree of success from planned information and networking events. As mentioned earlier in the study, events are defined as a key focus area for the DCZ in its knowledge-sharing approach. In this section we track the following outcome and associated indicator data:

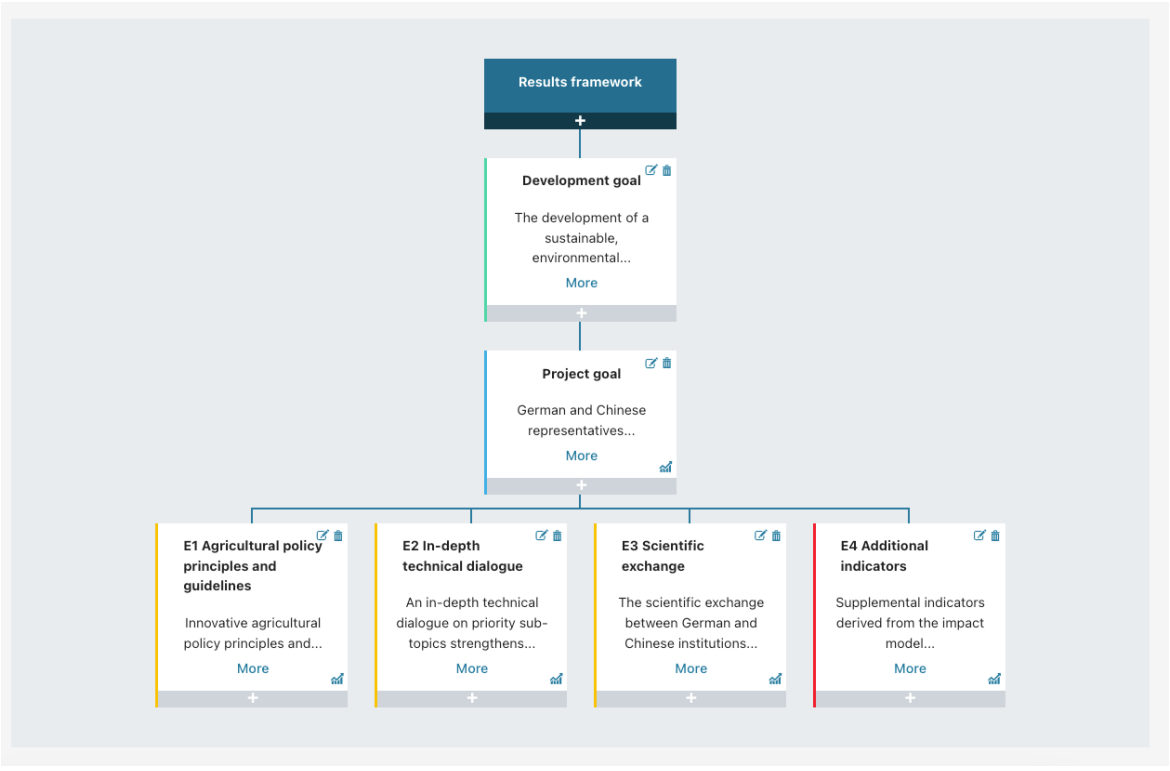


	Fields from the DCZ results model	Complete list of indicators, operationalized	Indicator number in TolaData	Instrument	Source	Sample	Time of data collection	Time of data analysis
31	Participants have increased their knowledge about the situation and solutions in the respective partner country.	70% of surveyed participants (by type of actor) of DCZ flagship events and workshops state that they learned about new solutions to current agricultural and food issues during the event.	O.2a	Online questionnaire	Participants	All events (e.g. SGAM, conferences, workshops, seminars, study trips)	At the end of each event	After each event and Once every half a year, for reporting
32		70% of surveyed participants (by type of actor) of DCZ flagship events and workshops state that they have increased their knowledge during this event.	O.2a	Online questionnaire	Participants	All events (e.g. SGAM, conferences, workshops, seminars, study trips)	At the end of each event	After each on-site event and Once every half a year, for reporting
33	Relevant participating actors from German and China have established new contacts with each other.	70% of surveyed participants (by type of actor) of DCZ flagship events and workshops state that they made new contacts during the event.	O2.c	Online questionnaire	Participants	All events (e.g. SGAM, conferences, workshops, seminars, study trips)	At the end of each event	After each on-site event and Once every half a year, for reporting
34	German and Chinese stakeholders and other participants exchange their opinions, knowledge and experiences on those suggestions as well as on other relevant topics.	70% of surveyed participants (by type of actor) of DCZ flagship events and workshops state that they have discussed agricultural issues in China and/or Germany with other participants during the event.	O2.b	Online questionnaire	Participants	All events (e.g. SGAM, conferences, workshops, seminars, study trips)	At the end of each event	After each on-site event and Once every half a year, for reporting
35	Results and recommendations for a more sustainable and climate-friendly agriculture are perceived as relevant for shaping future agricultural policies.	70% of surveyed participants of at least five DCZ flagship events and workshops state that the solutions presented at the event are relevant for shaping future agricultural policies.	O.1	Online questionnaire	Participants	All events (e.g. SGAM, conferences, workshops, seminars, study trips)	At the end of each event	After each flagship event and Once a year, for reporting
36		Policy recommendations from DCZ events are reflected in statements by Chinese policymakers.	K.12	Collection of statements; Text analytic	Chinese media sources	Arbitrary sample of all media coverage the DCZ is informed about	Continuously	Once every half a year, for reporting (comparison for every 6 month)
37		Number of positive statements by DCZ stakeholders (by type of actor) about the value of the DCZ as a dialogue platform.	K.13	Collection of statements	Emails from DCZ stakeholders, comments on social media, and comments received	All emails and social media comments the DCZ receives; All conversations the DCZ team have with stakeholders	Continuously	Once every half a year, for reporting (comparison for every 6 month)
38	The DCZ is recognized and valued as a dialogue platform.	70% of surveyed representatives from the BMEL and NAMA and their subordinate institutions confirm that the DCZ is a valuable dialogue platform and has contributed significantly to the	O.6	Online questionnaire	Participants	Representatives from related departments at BMEL and NAMA	Towards the end of the project phase	Towards the end of the project phase for

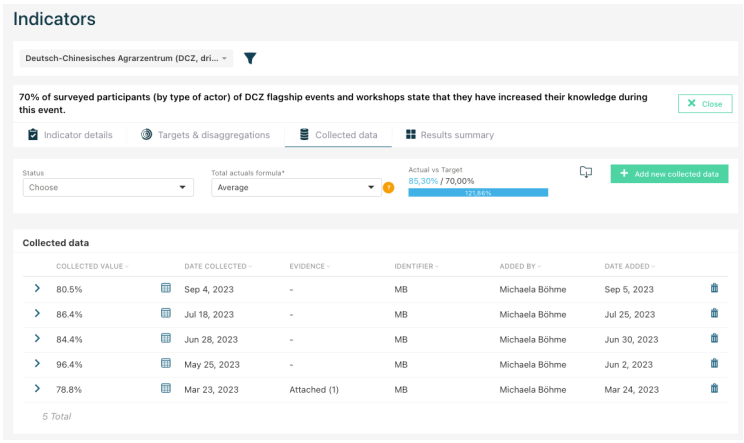
XLSX flie of DCZ Monitoring Plan with affiliated indicators

> **Outcome**:
> *Participants have increased their knowledge about the situation and solutions in the respective partner country.*
>
> **Operationalised Indicator:**
> *70% of surveyed participants (by type of actor) of DCZ flagship events and workshops state that they have increased their knowledge during this event.*

Following a DCZ-organised event, data collection is carried out through online surveys and is submitted by participants. Survey data is analysed and is input into the TolaData platform to commence the monitoring of results against set targets.

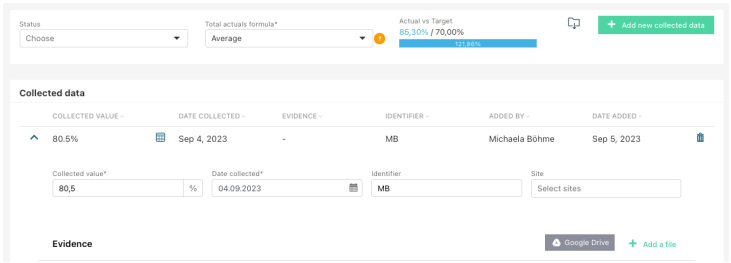


The DCZ project results framework as depicted in the TolaData platform.



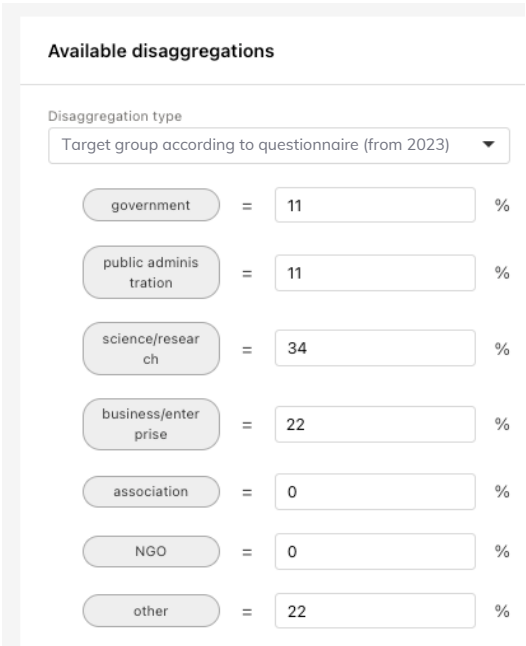
1. View of collected data items related to an indicator in the TolaData platform.

Each event is tracked as an individual activity and can receive detailed data from numerous sources, including linked data tables and additional evidence files for tracking data provenance. If needed, complex surveys can be carried out with TolaData's own form-builder or other integrated data collection tools like KoboToolbox, which can be linked directly to indicators.



2. View of individual data item related to an indicator in the TolaData platform.

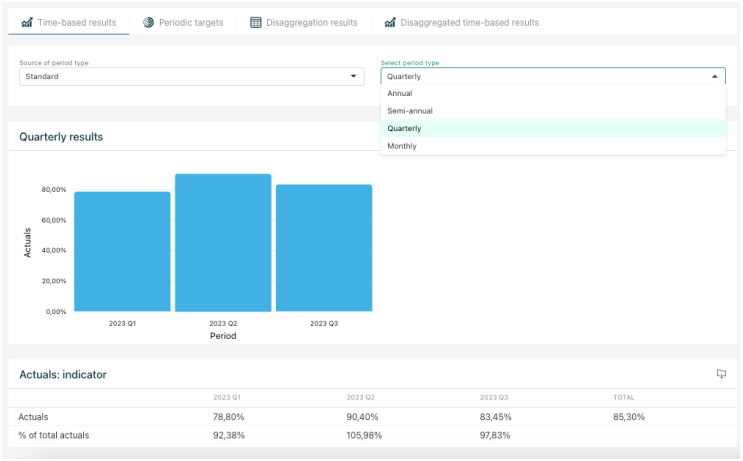
As per indicator requirements, survey data can be input according to 'type of actor' to enable detailed disaggregated analysis at a later point.



3. View of disaggregation break down in the TolaData platform.

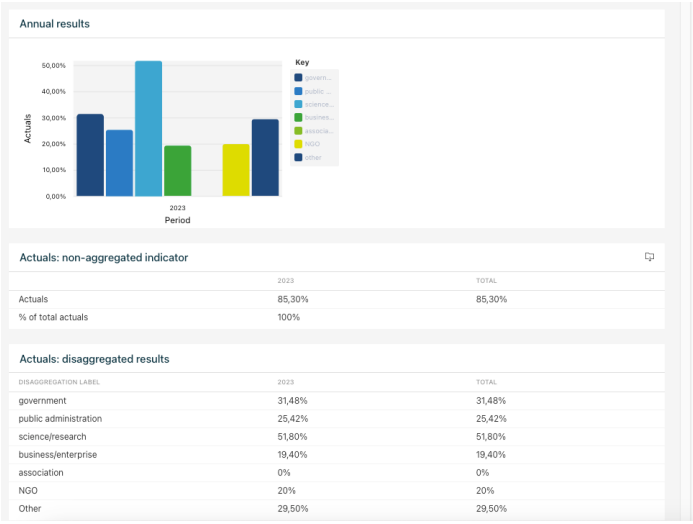
Systematic overview of project goals and results:

Once data is collected for each event, TolaData provides the ability to review the status of results through aggregated data in a range of formats. In this instance, survey responses are being shown using the time-based results function, which can be set to monthly, quarterly, semi-annual and annual periods.



4. View of collected data broken down by reporting period in the TolaData platform.

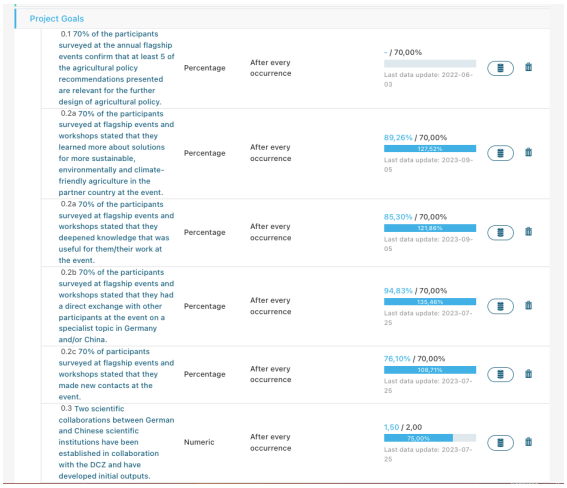
Furthermore, it is possible to obtain a detailed review of an indicator's status from multiple angles over a given period using the disaggregation of time-based results function. By segmenting the data on the platform it is possible to immediately see if set goals for target groups are being met by custom-set attributes, for example by location, industry, age or gender.



5. View of disaggregated results overview in the TolaData platform.

After reviewing individual indicators, it is possible to obtain an ongoing top-level overview of the status of activities and how multiple indicators are contributing towards a larger goal as it sits in the broader results framework.

The indicator list provides a quick summary of key information and a visual representation of an indicator's actuals vs targets, providing peace of mind that projects are well on-track.



6. View of a project's Indicator workflow in the TolaData platform.

Support simplified stakeholder reporting:

One of the most powerful features of TolaData is the configurable dashboard option, which is a dynamic and interactive way of presenting and exploring a project's data. TolaData dashboards are a collection of widgets that display different aspects of the project's performance, such as indicators, outcomes, activities or feedback.

The DCZ team can create their own dashboards or use predefined ones, and can customise the results with different layouts, colours, filters or annotations. The dashboards can also be embedded into websites or other platforms or exported as PDFs or images.

TolaData dashboards offer several benefits for the DCZ team and their stakeholders: They meet the growing demand for accountability and transparency by showing the most up-to-date results of the project at every stage of the project cycle, thereby opening space for collaboration by giving stakeholders direct access to the project information for feedback or steering suggestions.

> *TolaData provides the right mix of **visual and data-driven tools** to communicate on project progress – both **within the team and to external stakeholders**.*
>
> MICHAELA BOEHME, POLICY ANALYSIS AND PUBLIC OUTREACH, DCZ

The native dashboard options also reduce the risk of human error by automating the data import and analysis process and avoiding manual copying, pasting and merging of data from different sources. By removing the need to manually handle data through the various stages of the cycle, users have more confidence that their own reporting accurately reflects their actual results. What's more, the reporting process can be further simplified through the instant sharing of up-to-date results by generating an instant dashboard URL, saving needed time and resources which would otherwise be dedicated to arduous publishing and version-control tasks.

7. View of a DCZ dashboard in the TolaData platform.

CLICK HERE TO SEE A LIVE DASHBOARD

THE RESULTS

As of November 2023, the DCZ project has achieved commendable results in the third phase of the project, demonstrating its value as a platform for bilateral exchange and cooperation in the agri-sector.

DCZ team at smart agriculture forum in Weifang, Shandong province, Chinal April 2023. Click here for more info.

Events

A key highlight includes the hosting of the 9th Sino-German Agricultural Week (31 October–3 November 2023), the first such in-person agriculture week since the end of the pandemic. Over 200 participants attended from the policy, research and business communities and welcomed high-level delegations from Germany and China, headed by German Parliamentary State Secretary Ophelia Nick and Chinese Vice Minister of Agriculture Ma Youxiang.

The DCZ also held 10 workshops and webinars covering a wide range of issues, including food security, digitalisation & smart agriculture, climate-resilient agriculture, agro-biodiversity, urban agriculture and digital villages. The online webinars reached over 1,000 viewers in both Germany and China. Participant feedback was very positive, with over 80 percent saying they learned more about approaches in the partner country and that the event was useful for their work.

Additionally, the DCZ team also held the first study tour of high-level representatives from the Chinese Academy of Ag Sciences (CAAS) to Europe since the pandemic, involving directors from eight CAAS institutes and a visit of 10 research institutions and agriculture organisations in Germany and France.

Public outreach:

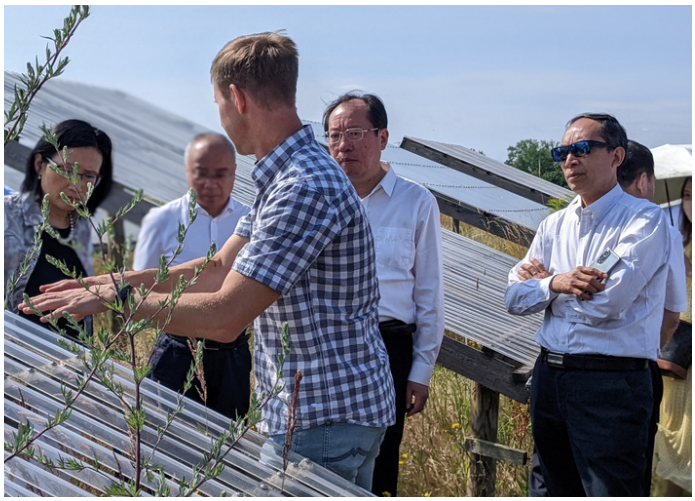
In addition, the DCZ has made significant efforts to increase its public outreach and visibility through various channels and products. The DCZ relaunched its website with up-to-date content on developments in agriculture policy and science in China, attracting an average of over 500 unique visitors per month. The DCZ also published over a dozen studies and policy briefs on key topics in Sino-German agricultural cooperation, which are available for download from the website free of charge.

The DCZ also produces a monthly newsletter delivered to over 800 recipients and a bi-annual magazine Harvest (丰收) with contributions by well-known experts and researchers from Germany and China. Furthermore, the DCZ uses social media platforms such as Facebook, Twitter, YouTube, and WeChat to share its activities and achievements with the interested public, reaching an audience of over 10,000 followers across all channels.

Central hub for research institutes:

The DCZ also helped establish collaborations between ag-related institutions from both countries in the fields of food loss and waste, agro-biodiversity, rural development, involving institutions such as Thünen Institute, Farmers' Seed Network, CAAS, VERN e.V. These collaborations aim to foster joint research and innovation in the agri-sector and to contribute to the global goals of sustainable development.

The digital monitoring of results has enabled the team to showcase project achievements and challenges in a transparent and engaging way, with the goal of fostering agricultural knowledge exchange and collaboration between German and Chinese counterparts through data-driven insights and learnings.



CAAS directors visit research facility of Helmholtz Environmental Research Center, Germany, July 2023. Click here for more info.

TolaData Case Study

The Sino-German Agriculture Centre: Results Monitoring and Donor Reporting for a Bilateral Ministerial Project in China

This document was produced by TolaData with support from the DCZ in October 2023. All screenshots were generously provided by DCZ, with charts adapted by TolaData from the DCZ documents and other sources. Cover image generated with Stable Diffusion.

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TolaData

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