


Building political support

Edited Volume**Author(s):**

Butikofer, Sarah; Falk, Marcel; Last, Luisa; Neu, Urs; [Paschke, Melanie](#) ; Pavageau, Charlotte

Publication date:

2019-06-19

Permanent link:

<https://doi.org/10.3929/ethz-b-000312492>

Rights / license:

[In Copyright - Non-Commercial Use Permitted](#)

Originally published in:

Engaging in the Science-Policy Dialogue 6

Funding acknowledgement:

608422 - IDP Bridging Plant Science and Policy (EC)

Engaging in the science-policy dialogue

6

Building political support

Publisher
Zurich-Basel Plant Science Center

Editors
Melanie Paschke
Manuela Dahinden



University of
Zurich^{uzh}

| **ETH** zürich



University
of Basel

Publisher

The Zurich-Basel Plant Science Center is a competence center linking and supporting the plant science research community of the University of Zurich, ETH Zurich and the University of Basel. The center promotes plant science research and education and provides platforms for interactions with peers, policymakers, industry, stakeholders and the general public.

Zurich-Basel Plant Science Center
ETH Zürich
Tannenstrasse 1, TAN D5.2
8092 Zürich, Schweiz
+41 (0)44 632 23 33
info-plantscience@ethz.ch
www.plantsciences.ch

Editors

Melanie Paschke and Manuela Dahinden

Layout

Manuela Dahinden and Fabian Leuenberger

Illustrations

Fabian Leuenberger

Editing

Kaitlin McNally, Karina Oborune, Joseph Swann and Annina Ziltener

Version 1: 19.09.2019

Download link

DOI: 10.3929/ethz-b-000312492

Citation

Bütikofer, S. (2019). Building political support. With contributions of: Falk, M., Last, L., Neu, U., Paschke, M., Pavageau, C. and C. Rey. In: Paschke, M. and Dahinden, M. (eds.): Engaging in the science-policy dialogue, Workbook 6. Zurich: Zurich-Basel Plant Science Center.

We would like to thank the funding agencies and foundations supporting the PSC Science & Policy training program for graduate students, including the Swiss Science Foundation, the European Commission and the Mercator Foundation Switzerland.

© Zurich-Basel Plant Science Center
Engaging in the science-policy dialogue, 2019

Authors and chapters

THEORY

Sarah Bütikofer

Decision-making in Switzerland

COMMENTS

Melanie Paschke

Legitimate advocacy in democratic societies – considerations on responsible conduct

Charlotte Pavageau

Lobbying in Switzerland

TOOLS

Luisa Last

Role play: parliamentary meeting

World café

EXAMPLES

Urs Neu and Marcel Falk

ProClim – an interface organization facilitating science-policy dialogue about climate change in Switzerland

Chrissie Rey

Building political support for cassava research in South Africa – a personal journey

Contents

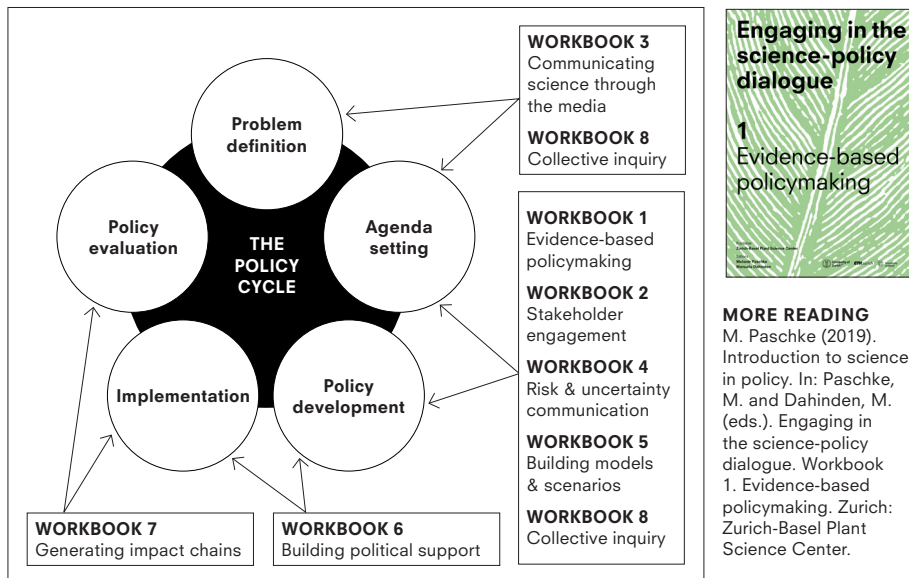
EDITORIAL	5
GUIDE TO WORKBOOK 6	6
1. THEORY	
1.1. The Swiss political system	10
1.2. Elections in Switzerland	12
1.3. The law-making process	13
2. COMMENTS	
2.1. Legitimate advocacy in democratic societies – some considerations on responsible conduct	24
2.2. Lobbying in Switzerland	27
3. TOOLS	
3.1. Role play: meeting an MP	32
3.2. World café	34
4. EXAMPLES	
4.1. ProClim – an interface organization facilitating science-policy dialogue about climate change in Switzerland	38
4.2. Building political support for cassava research in South Africa	41
REFERENCES	46
INDEX	47

Editorial

Scientists need a sophisticated understanding of the political system and of the rules that people follow within organizations to ensure research findings are taken up into policy.

This workbook is the sixth in a series of eight workbooks exploring the role of scientists in the science-policy dialogue. It provides an overview of the most important elements of the Swiss political system. It outlines the general structure and law-making process and discusses how scientific experts are able to exert influence on political processes and decisions. In contrast to political systems, where the only official political participation of citizens is the election of representatives, Switzerland has a political system of direct democracy, which means that people decide directly on many policies by regular referendums.

FIGURE 1 — The policy cycle.



Guide to workbook 6

The aim

Workbook 6 introduces you to the direct democracy and law-making process in Switzerland. You will learn how to engage in the law-making process as a scientist.

Competencies

- You will understand the peculiarities of the Swiss direct democratic system.
- You will recognize the stages, actors and instruments of the Swiss law-making and decision-making process.
- You will recognize when and how scientists can interact with the law-making process.
- You will understand the role of advocates and lobbyists in the Swiss law-making process.

How to read this workbook

THEORY

Decision-making in Switzerland

This introduction gives an overview of the main actors and instruments in the policymaking process.

Instruments for science-policy endorsement

This section introduces the essential steps in the process of policy endorsement in Switzerland. What are the stages where researchers can be involved?

COMMENT

We will introduce you to the idea of advocacy and lobbying by exploring the following questions: Can we define guidelines for responsible advocacy conduct? How is lobbying defined and what is its role in the Swiss policymaking process?

TOOLS

We present two tools that can be used to interact with stakeholders such as parliamentarians at different stages in the decision-making process. While the parliamentary meeting is a formal event set up in the middle of the policymaking process (i.e., during agenda setting, policy formulation and policy development) the world café offers the opportunity to interact with policymakers and parliamentarians early in the problem definition stage. We simulate the parliamentary meeting as a role play.

EXAMPLES

In Switzerland various interface organizations play an important role in building political support. Here we present the work of ProClim, a platform of the *Swiss Academy of Sciences (SCNAT)* facilitating the science-policy dialogue about climate change in Switzerland.

We also take a look into the international practice of building political support by presenting the efforts undertaken for cassava research in South Africa. The objective of these practice examples is to understand the complexity of the science-policy interface and the roles of science and interface organizations in the process.

1. THEORY of decision-making in Switzerland

Sarah Bütikofer

Lecturer and researcher, University of Zurich, Department of Political Science

THEORY

COMMENT

TOOLS

EXAMPLES

1.1.	The Swiss political system	10
1.2.	Elections in Switzerland	12
1.3.	The law-making process	13

1.1. The Swiss political system

Swiss politics is sometimes complex to understand, as many actors intervene on different functional levels. As a general rule and following the principle of subsidiarity, political decisions are usually taken at the lowest possible level.

Cantons

The Swiss Federal State comprises 26 independent regional states, called cantons. All cantons have equal rights and benefit from a high degree of independence. Cantons regulate many policies without any federal intervention, e.g., educational policies, cantonal infrastructure projects and cantonal health care. Cantons have their own constitution, too, and their own parliament, government and judicial system.

Communes

Decisions concerning many political topics are made on the local level in approximately 2200 Swiss communes (e.g., villages and cities). In this way, the local citizens exercise their communal sovereignty. Communes decide on taxes and financial issues at the local level and, depending on the size of the commune, on larger projects in the domains of healthcare and education, on infrastructural projects in their territory and on social services for their citizens, especially for young people and the elderly.

In the following pages, we will concentrate on the national level and leave aside the particularities of Swiss federalism.

Particular features characterize the Swiss political system

Direct democracy

Swiss citizens are called several times a year to vote on different political issues on the communal, cantonal and national levels.

Hybrid system

The Swiss political system is often described as a hybrid system (Lijphart, 2012) since it combines elements of a presidential system (i.e., a guaranteed four-year period of governmental office) and a parliamentary system (i.e., election of the Federal Council, the executive branch of the Swiss government, by the Parliament). In addition, the Federal Council cannot be dismissed if it loses the support of the majority in the Parliament or if some of its law proposals are not approved, nor can the Federal Council call early elections during the four years of the legislative term. In addition, the Swiss Parliament, or Federal Assembly, is still a non-professional body.

System of concordance

Swiss politics is built on the idea of reaching compromise, which, in the Swiss context, is often referred to as the system of 'concordance'. One of the most visible aspects of this system is the composition of the national government. The Federal Council includes members of the most powerful parties in the Parliament, which agree, on a more or less voluntary basis, on the distribution of seats. However, there is no coalition program and no common political goals for a legislative term upon which they agree beforehand. With the integration of the most important parties into the Federal Council government tries to avoid the 'threat of direct democracy' (Ladner, 2014). A non-integrated important party is more likely to fight governmental decisions through referendum. Also a sense of power sharing is part of Swiss political culture: the most important parties should share governmental power and agree on solutions supported by broad majorities.

The Swiss party system was extremely stable for a long period. But since the beginning of the 1980s, it has been marked by important developments. Most significant is the rise of the right-wing populist *Swiss People's Party*, which has become the largest party. New parties, such as the *Greens*, have also emerged, while traditionally dominant parties such as the *Liberal Radical Party* and especially the *Christian Democrats*, have seen their vote shares decline¹. The weakening of center and center-right parties has led in recent years to a stronger polarization within the Swiss party system.

¹ Swiss parties usually provide up to five 'official' names, e.g., their name in every national language and in English.

1.2. Elections in Switzerland

Elections are the moments in which citizens of a country are asked to choose their representatives. The aim of every election is to guarantee the representation of the population in the decision-making bodies of a nation-state. From the age of 18, Swiss citizens receive voting rights at all political levels and may participate in elections, both actively and passively. Additionally, all Swiss nationals have the right to vote in nationwide ballots on concrete political issues. These usually take place on four Sundays in every year.

Different countries have different electoral systems, with most of them falling into two general categories: majority systems and proportional representation systems. In Switzerland, both systems are used for different offices or at different levels of the federal system.

Majority system

In a majority system (often called 'first-past-the-post' when applied to a single-member district) the person elected is the one with the most votes. This method tends to favour large parties and well-known candidates. In Switzerland, most Senators (members of the Council of States, the upper house of the Federal Parliament) are elected in this way as are the members of the National Council (the lower house) in the smallest cantons, which have a single representative. It is also the system used for the election of most executive bodies at the cantonal and local levels.

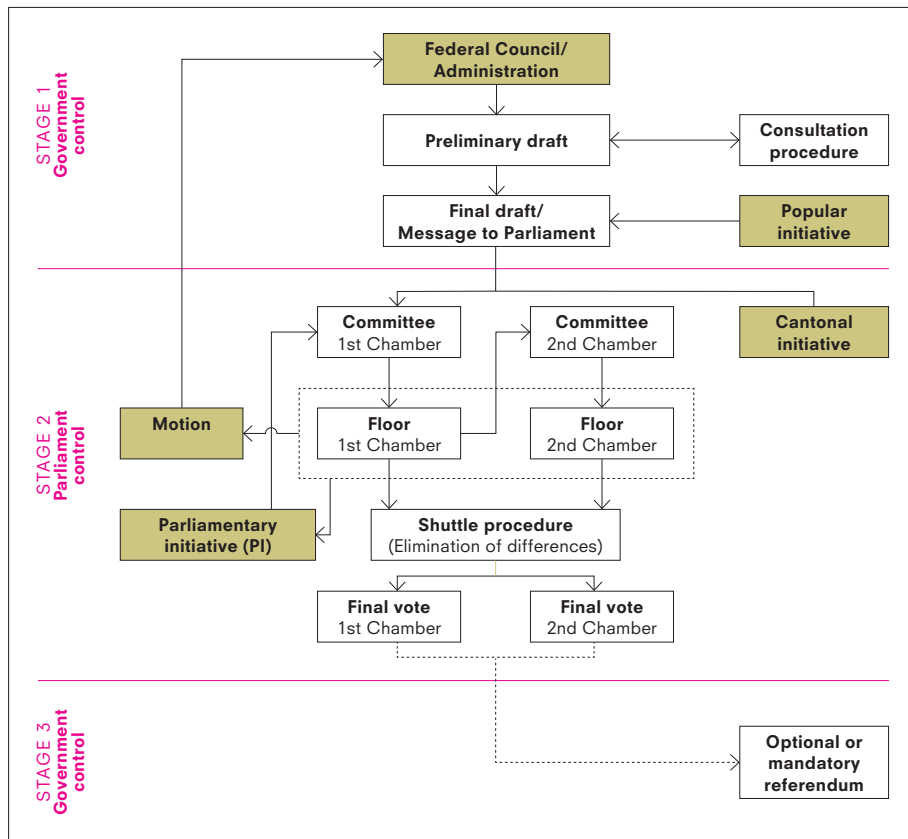
Proportional representation system

In a proportional representation system, seats are distributed among parties in proportion to their share of votes, and the candidates on the party list are elected in accordance with the number of personal votes they receive. This system is much more favourable to small parties, particularly in those cantons which have a larger number of seats in the National Council, as it lowers the percentage of votes required to gain parliamentary representation. Proportional systems are also used for the election of most cantonal parliaments.

1.3. The law-making process

The principle of integrating a broad range of political positions is also mirrored in the law-making process in Switzerland. Figure 2 shows the various stages, actors and instruments that form part of this law and decision-making process. Bringing in new legislation is a complex process that can take up to a decade. The following paragraphs give further information about the actors, instruments and political processes shown in figure 2. The law-making process can be divided into three independent STAGES: two of them are controlled by the government (STAGE 1 and STAGE 3), while STAGE 2 is controlled by Parliament.

FIGURE 2 — Stages, actors and instruments of the law and decision-making process in Switzerland.



THEORY
 COMMENT
 TOOLS
 EXAMPLES

STAGE 1

The beginning of the law-making process. A new bill is usually initiated by the Federal Council or the Federal Administration, sometimes on the basis of a parliamentary motion or a popular initiative.

The Federal Council

Switzerland is governed by a Federal Council of seven members. These **Federal Councilors** can be seen as ministers with a double function: each one of them is the leader of a Federal Department and a member of a government body with equal powers. The term of office is four years, with a president elected for a one-year term, only as a 'primus inter pares', i.e., first among equals.

The Federal Council is composed of members of different parties. The **Federal Assembly**, the Swiss bicameral Parliament, elects the ministers individually, following a seniority principle. Since 1959 the Federal Council has been composed of two members from the *Radical Free Democratic Party*, the *Christian Democrats* or the *Social Democrats*, as well as one member of the *Swiss People's Party*. This seat allocation was called the 'magic formula'. After the Federal Council elections in 2003, the *Swiss People's Party* won a second seat at the expense of the *Christian Democrats*. Since then, the Federal Assembly has elected the members of the government according to the seat allocation of the parties with the highest vote share in the Federal Assembly.

Consultation

Whenever the **Federal Administration** drafts a new bill, a consultation procedure starts. The Federal Administration of Switzerland consists of seven **Federal Departments** and the **Federal Chancellery**. The responsibilities of each department – or ministry – are broader in Switzerland than in other countries, as the departments unite a wide range of different federal offices and agencies. Over the last few decades, the staff of the Federal Administration has increased and offers many highly skilled jobs for persons with academic degrees and expertise in particular fields.

The consultation procedure is specific for Switzerland and is a key aspect of the pre-parliamentary phase. It means that a large number of political and societal actors are invited to evaluate the preliminary draft of a new bill. This implies that the Swiss cantons, the Federal Courts, all political parties, Swiss business federations and other societal organizations like think tanks and NGOs can all submit their comments on the draft and propose concrete amendments.

When a preliminary draft has gone through the consultation procedure, the head of the department signs the final draft. Afterward, his or her fellow Federal Councilors are given the opportunity to submit their views on it in a joint reporting procedure. When this procedure comes to an end and so long as the bill is formally and legally correct, the final draft is put on the parliamentary agenda in order to start the deliberation process. If the draft for a new bill is based on a popular initiative, the pre-parliamentary phase starts directly with a preliminary draft elaborated by the relevant department of the **Federal Government**.

STAGE 2

The parliamentary phase of the law-making process is characterized by debates both in the Parliamentary Committees and on the floor of the Parliament.

The Parliament

The Parliament of Switzerland is a bicameral system with an **Upper Chamber** representing the Cantons and a **Lower Chamber** representing the citizens. The two chambers are given equal powers. Both chambers together constitute the Federal Assembly. The **Lower House** (National Council) is the representative of the Swiss people. The representatives of the 26 cantons sit in the **Upper House** (the Council of States).

The **Council of States** has 46 seats. Each canton sends two representatives to the Council with the exceptions of six cantons, formerly called 'half cantons,' that only send one representative. The members of the Council of States are elected in a majority system. The elections take place following cantonal legislation and there are some differences in the electoral rules of the different cantons. For example, cantons may have a different day for the election, a proportional electoral system, or the right to vote for foreigners.

The **National Council**, the Lower House, has 200 members. The number of seats for a given canton varies according to its population. While 34 **Members of Parliament (MPs)** represent citizens of the canton of Zurich, the largest canton, some of the small cantons in the rural regions of Switzerland have only one seat. The electoral system for the National Council is a proportional system with open lists. Citizens are given different options to compose the list of candidates they would like to support. They can simply take the pre-established list of a party or modify it by striking out or adding candidates from other parties ('panachage'), or they can express support for a particular candidate by giving him or her two votes ('cumulate'). They can also start from an empty list and combine candidates from various parties.

Expert hearings in the Parliamentary Committees

The **Parliamentary Committees** conduct initial discussions on all items of interest. The Committee is the place where most of the parliamentary work is done and where many preliminary decisions are already taken before a bill goes to the floor of the Parliament. Committees invite experts for hearings, or consult experts outside the Parliament or the Federal Administration in order to obtain more information on the topics under discussion.

There are nine standing **Legislative Committees**, whose main task is to make a preliminary examination of legislative proposals. Each of them is responsible for a specific domain such as transport, legal affairs, foreign or social policy, science, education or culture. In addition, the **Finance Committee** and the **Control Committee** oversee federal finances and the activities of the Federal Council and Federal Administration respectively. The meetings of the Committees are closed and there are no official records of the minutes of these meetings, so that the members can express their positions more freely. However, after their meetings, the committees usually inform the media of the outcome of major discussions. The National Council (Lower House) Committees have 25 members each, while those of the Council of States (Upper House) have 13 members. Their composition depends on the relative strength of the parliamentary groups, that is, on the parties' share of seats in each chamber.

Voting in the Parliamentary Chambers

As soon as the debate of a final draft on a new bill comes to an end in the first committee, the draft goes to the floor of the 1st Chamber. Upon completion in the 1st Chamber, deliberations start in the committee of the 2nd Chamber. This committee discusses the current version of any particular bill submitted to the final vote in the 1st Chamber. The committee can review all the amendments accepted during the previous phase and can decide to eliminate them. After the final vote at the committee stage, plenary discussion starts in the 2nd Chamber, again following the same procedure. This phase concludes with a final vote, too. Only if both chambers agree on a new bill is a final vote taken in both of them.

If there is no agreement between the two chambers, the bill goes back to the lower house, initiating a second phase of deliberation. This is called the shuttle procedure. The aim of this second round of deliberation is to reach an agreement. If there is still no agreement between the two chambers after three phases of deliberation, a **Conciliation Committee** is formed. This committee, composed of members of both chambers, tries to eliminate the differences between the two chambers and proposes a new version of the bill. This proposal is then submitted to a vote in each of the two chambers. If the proposal of the Conciliation Committee is rejected by any of the chambers in this vote, the bill fails as a whole.

Any member of the National Council or Council of States can make a procedural request to introduce a new law, add a new provision into **the Constitution**, or have an existing law amended. They can also request the Federal Council or the Administration to provide a report or information. Members of Parliament (MPs) can use a parliamentary initiative to propose that the Parliament itself should enact a law – either by formulating the idea or even drafting the law itself. With a **motion**, an MP can assign the role of lawmaker to the Federal Council. A **postulate** is used to request the Federal Council to examine whether a new law or decree should be drafted or measures taken, while an **interpellation** is a request to the Federal Council to provide information on significant domestic or international events. It can be assumed that members of the Federal Assembly are more likely to use such parliamentary instruments after having been in contact with representatives from particular interest groups or with experts in a specific field.

Switzerland's parliament is a so called 'militia' (part-time) parliament: its members dedicate a great part of their working time to parliamentary work, but a significant number of parliamentarians continue to pursue other professional activities. One of the consequences of this system is that Swiss parliamentarians do not have staff members or personal assistants, but depend more on information provided by lobby organizations and extra-parliamentary experts. **Lobbyists** are professionals who usually work for an interest group or on behalf of an organization or business company within the network of politics in order to try to influence political actors to create legislation in a specific way.

The ideal of a militia parliament is still strongly anchored in Swiss society. It is not surprising that several attempts to reform and professionalize the Parliament at the national level have failed in the past, with the argument that the militia system guarantees closer links between representatives and the population. Nevertheless, all empirical studies show that MPs with full-time careers outside of politics have become increasingly rare at the national level and

most Swiss MPs devote a significant part of their working time to politics. A growing number of MPs dedicate most of their time to politics or work only for associations, trade unions or in other organizations related to politics (Oesch, 2006). However, only a few MPs actually consider themselves full-time politicians. Many MPs still avoid labeling themselves as professional politicians, for instance, in the biographical information on the website of the Swiss Parliament. The argument is that MPs want to keep a strong link with the people they represent, and avoid becoming isolated from the preferences and problems of their constituencies. Consequently, Swiss politicians, even on the national level, are relatively easy to access. Usually, media professionals, voters and other interested parties can contact them by e-mail or social media.

STAGE 3

The last phase in the Swiss decision-making process involves the whole electorate, as Switzerland is a direct democracy.

Direct democracy means direct involvement of citizens in political processes. This is vital on every level of government in Switzerland: municipal, cantonal and national. There are three main types of direct democracy tools: mandatory referendum, facultative referendum and initiative. For constitutional amendments, a popular vote is mandatory (**mandatory referendum**). In this case, a constitutional change is only adopted if it is first supported by a majority in the Parliament, and then if it is accepted in a popular vote both by the majority of citizens and in the majority of the Swiss cantons. For parliamentary proposals that intend to change or implement a new law, Swiss citizens may ask for a so-called **facultative referendum** on the proposed text by collecting 50,000 signatures. The legislative proposal is rejected if a majority of citizens opposes the bill in the referendum. If no referendum is launched, the parliamentary decision is automatically implemented after 90 days. Finally, Swiss citizens themselves can ask for a constitutional amendment (**initiative**) by collecting 100,000 signatures. Before initiatives that successfully pass this threshold are put to a popular vote, legislators are required to vote on them in the Parliament. However, their approval is not necessary for passing the amendment (Giger and Klüver, 2016).

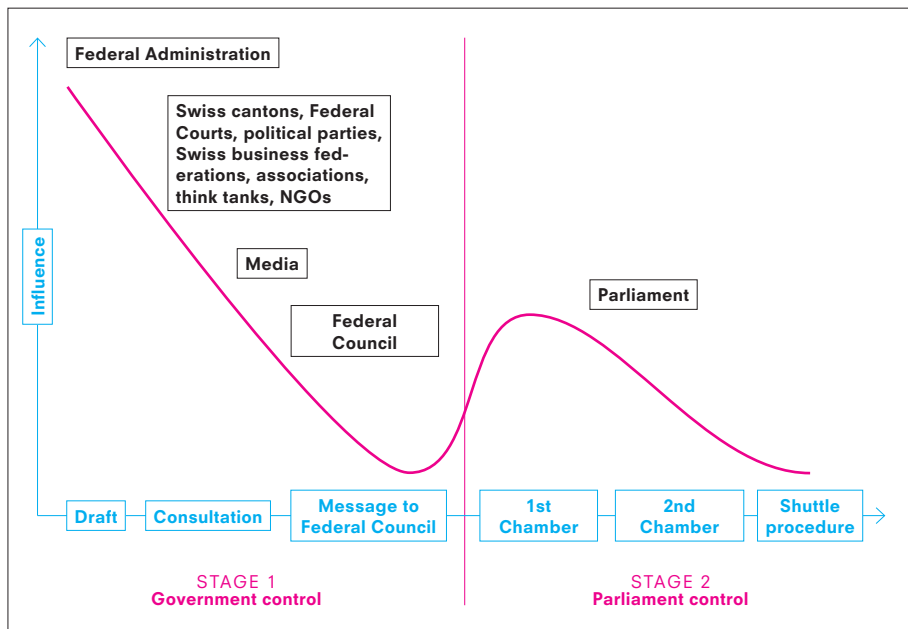
A mandatory referendum is called for all constitutional amendments, as well as for membership of specific international organizations. This means that a popular vote must be held on such texts. In order to be accepted, a so-called double majority must support constitutional amendments and other texts requiring a mandatory referendum. These must be supported not only by majority of citizens, i.e., the majority of the valid votes cast in the whole country, but also by a majority of cantons. So there must be a majority in favor of the proposal in a majority of cantons. New laws, amendments to existing laws and similar parliamentary decisions, as well as certain international treaties are only subject to a popular vote if required by an optional referendum. In that case, a popular majority is sufficient for such a proposal to be accepted. In theory, every Swiss national can start to collect signatures to ask for a referendum or a popular initiative. In practice, it is mainly the parties, trade unions and inter-

est groups with strong organizational skills and sufficient funding that are able to request a popular vote. In the run-up to such popular votes, parties, interest organizations and lobbying agencies campaign to try to convince the population with their arguments. Interested individuals can engage in the process by debating with political actors or by communicating their point of view via letters, online comments or through social media.

Influence in the law-making process is a question of interaction within the right time frames. It will be more effective if you can exert your influence early in the process.

FIGURE 3 — Time frames for influence in the decision-making process.

Adapted from Kaufmann and Hugi, 2014.



EXERCISE 1

Reflect and describe:

At what stage can scientists interact?

Having carefully read through the Swiss system of decision-making, at what level or levels do you think researchers could get involved?

Evaluate the possibilities of exerting influence on political decisions as a citizen, a junior researcher and a senior researcher. At what stages and with which instruments could scientists get involved in the law-making process?

	STAGE 1	STAGE 2	STAGE 3
Citizen			
Junior researcher			
Senior researcher			

EXERCISE 2

Following parliamentary sessions in Switzerland

Parliamentary sessions are announced on the internet and all planned discussions are publicly explained: see: www.parlament.ch/en (The Federal Assembly, 2017a). As an example, the 'Umweltallianz', a network of environmental NGOs (incl. WWF, Pro Natura, Greenpeace etc.) prepares and publishes for each session their opinions on pending discussions. These opinions are then available on the internet, but more importantly, they are delivered directly to their parliamentary contacts and to committees and heads of parties: see: www.umweltallianz.ch (Umweltallianz, 2017)

TO DO

For German- or French-speaking students: check the preview of the next session in the Swiss Parliament. The preview can be downloaded under the following link (Select 'Sessionsvorschau' or 'Session briefings'): www.parlament.ch/en/ratsbetrieb/sessions/overview-briefings (The Federal Assembly, 2017b).

Select 1 or 2 topics that interest you, put the 'Geschäftsnr.' in the search form of the following web site, and answer the subsequent questions:
www.parlament.ch/en/ratsbetrieb/suche-curia-vista

- When was the topic first raised and by whom?
- What happened then?
- Cite one significant statement (if any).
- What is the current state of the topic?

Visit the sites of the Committees to see what topics will be discussed before the next session: www.parlament.ch/de/organe/kommissionen (in German), www.parlament.ch/en/organe/committees (in English) (Federal Assembly, 2017c).

Go to 'Liste neue Geschäfte.pdf' and 'Kommissionssitzungen.pdf'. Take notes on a topic you could potentially contribute to.

For the other students: check out governmental websites of your own country or of the country where you are doing your research. Is there any information available on how the government works? When is the next session? Are there possibilities to contribute (e.g., state your opinion on public consultations)?

Write a short summary of your search, providing links where possible.

smartvote: understanding both the political views of candidates and your own view

Getting an overview on candidates and their political positions in order to improve electoral decisions is difficult. Here, tools such as smartvote, developed and operated by the non-profit NGO Politools, are useful voting advice apps. Smartvote allows voters and other interested people to compare their own political views with those of political parties and candidates. Various political topics are addressed in a comprehensive questionnaire answered by political candidates and by the user. Both the political candidates and the user generate their political profile. The smartvote output presents (1) a spider's web with the profile of the user, which can be matched with the candidate's web; and (2) a specific ranking of all participating candidates.

Source: www.smartvote.ch

2. COMMENT

Melanie Paschke

Director of education at the Zurich-Basel Plant Science Center, lecturer at the ETH Zurich and University of Zurich, Switzerland

Charlotte Pavageau

Project manager of advocacy & policy at BIOVISION, a foundation for ecological development and former participant in the PSC Science & Policy training program for graduate students, Switzerland

2.1. Legitimate advocacy in democratic societies – some reflections on responsible conduct	24
2.2. Lobbying in Switzerland	27

2.1. Legitimate advocacy in democratic societies – some reflections on responsible conduct

Advocacy can be pursued by a variety of interest groups (e.g., citizens' groups, NGOs, private companies, lobbying firms, foundations, companies) on a wide range of topics: from anti-corruption campaigning or engagement in human-rights debates and risk assessment to the use of pesticides or economic interests.

While advocating as the more general term describes the process of advocates of a particular course of action that will seek to influence the policymaking process and the political actors, lobbyisms is part of the parliamentary stage with lobbyists that solicit the votes of members of the legislative body at the parliamentary stage.

The focus in this chapter is on some of the ethical considerations that advocacy of particular interests implies. Is this morally right? What are the values behind it? And how are advocacy and lobbyism anchored in the Swiss system of direct democracy?

Ethical considerations related to advocacy

Ethical views on advocacy and lobbyism center on considerations of the right to be heard. Advocacy can become the target of strong ethical concerns if powerful minorities with self-serving interests oppose the will of the majority. Are these groups capturing the democratic policymaking process and abusing it to serve their own interests? A more positive aspect comes into play when neglected minority interests are made visible and given a voice through advocacy, which then becomes a mechanism for establishing social justice.

Advocacy is the representation of interests within the framework of constitutionally legitimate decision-making processes. In a pluralistic and highly fragmented society advocacy must be included in consensus-building structures. The political system should include mechanisms to make group interests transparent and channel them into shared goals, participatory engagement and consensus.

The moral justification for advocacy derives from the ability of advocates to legitimately and credibly represent the interests of all groups in society, including minorities. Advocacy and lobbyism, in this definition, are intermediate aspects of the political system in which members of different political groups formulate their opinions and interests and influence the process of defining options for policymaking and consensus-building.

Advocacy inherently includes aspects of power inequality, and a political system may contain mechanisms to balance or exacerbate this inequality. For example, the higher the financial resources of advocates, the more likely they are to achieve success (Mahoney, 2008; Mahoney and Baumgartner, 2015). However, this becomes ethically questionable if financial

support is concentrated within some powerful minorities while other groups are excluded. For example, business groups sometimes engage in advocacy and policymaking with technical and scientific arguments, often without transparency of interests, credibility of evidence, or legitimation, which can easily result in conflicts.

Is scientific advocacy legitimate?

There are many famous examples where scientific advocacy of scientists has changed policies and helped to protect the environment. A famous example is Rachel Carson with *Silent Spring* (1962). Through her book on the dangers and negative consequences of pesticides for the environment, she changed official policies towards the regulation of pesticide use.

Scientific evidence is created through standardized and systematic scientific methods such as observation, experimentation, data collection and analysis. In this process scientists have to be independent, objective and value-neutral. Scientific evidence will enter the policy processes through mechanisms of social valorization. However, stakeholding, generating policy options and engaging in the decision-making process will always include elements of advocacy. Whether scientists enter into this process as Honest Brokers or Advocates, they have to be aware of and to articulate the values involved. What value frames, beliefs and interests underlie the dialogue of scientists with other stakeholders? For details on these roles see 'Workbook 1: Evidence-based policymaking' or Pielke (2007).

A strongly debated question is the co-financing of public research by private companies or the whole issue of private companies engaging in publicly funded research. The codes of conduct of universities ensure that funding sources of projects carried out in collaboration with private enterprises are declared and that grant agreements are disclosed to the public (Blumenthal, 1996).

A recent example of conflicting advocacy at the science-policy interface is the debate over the cancer risk linked to the herbicide glyphosate, where different conclusions about safety have been reached in two different studies: the *International Agency for Research on Cancer (IARC)* (Guyton et al., 2015) said that glyphosate probably does cause cancer in humans, while the *European Food Safety Authority (EFSA, 2015)* concluded that no cancer risk for humans is involved. A critical point in this debate is that EFSA included evidence from studies conducted by industrial groups that were excluded from the IARC analysis without ensuring transparency through a declaration of a conflict of interest (Cressey, 2015).

Transparency in advocacy

Advocates, and especially lobbyists, need to ensure transparency by declaring their underlying political interests. Conversely, lobbied policymakers have to make records available as to how they have balanced the interests of different advocates with the overall interests of society in the decision-making process. The aim of transparency is to maximize public debate through information, discussion, argumentation, evaluation and justification.

International pressure is increasing to regulate lobbying through various control mechanisms including registration of lobbyists. See section '2.2. Lobbying in Switzerland'. Codes of conduct for lobbyists can also help make lobbying more transparent.

A code of responsible conduct for advocacy and lobbying

Responsible advocacy is built on credible and salient evidence, on transparency and on accountability to society:

- Have advocates identified themselves by name and organization to those they seek to influence?
- Have they formulated their interests?
- Have they formulated their values?
- Have they formulated their position?
- Are they committed to a position based on reliable, verifiable and up-to-date information and objective and professional analysis?
- Have conflicts of interest been declared? Is the legitimacy of the position clarified? Is it clear who authorized the interest group (e.g., civil society, representatives from industry)?
- Have advocates declared that they will not exert in undue influence on decision-makers?
- Have they been transparent about their finances, funding or other resources used in the advocacy process?
- Are advocacy activities reported? And have reports and information been disclosed to the public, e.g., listing meetings with names of representatives of the advocates as well as advocacy target sites, scope of the meetings, etc.?
- Do advocates engage in a dialogue-based, social process of stakeholding?
- Are alliances declared?

2.2. Lobbying in Switzerland

Over the last decades, the lobbying landscape for policymaking in Switzerland has evolved quickly. Lobbyists or representatives of interest groups and organizations from the economic, political and societal sectors have emerged as key actors in the Swiss political system. The lobbying system has generally been seen as an integrated and essential aspect of the consensus-based Swiss democratic system. Lobbyists can influence the law-making process in a number of ways, including during the parliamentary phase (STAGE 2, figure 2).

Processes of lobbying

Parliamentary lobbying in Switzerland has two main forms. First, members of each of the Federal Chambers can designate two people to access the Parliament building. In particular, they get access to the so-called 'Wandelhalle' (lobby) and the gallery of the National Council chamber. They do not attend meetings of the Commission or sessions of the Parliament. These external 'guests'² can represent one or several organizations or interest groups, and thus get the opportunity to communicate directly with members of the legislative body or other government representatives within the walls of the Parliament. Secondly, members of the National Council or the Council of States can entertain direct relationships with specific sectors or firms. For instance, executive managers or board members of private firms can be elected to an office, as a consequence of the militia system. In some cases, Members of Parliament (MP) may be offered lucrative positions in companies assigned to specific parliamentary functions and commissions.

Types of lobby group

According to Giger and Klüver (2016), we can distinguish between two types of lobby group, representing either a societal group (e.g., from politics, economics, law, science, education, religion, art) or some general belief or principle responsive to the needs of social welfare. A study by von Boas and Rittmeyer (2016) has identified 1671 organizations with a representative in the National Council or Council of States in Switzerland. The largest lobby group in the Parliament is that of charity and non-profit organizations engaged in social issues. They represent 11% of the accredited representatives and typically campaign for public goods or human rights (Giger and Klüver, 2016). Most other powerful groups or organizations are associations that operate in specific sectors (Hürlimann et al., 2016). The industrial and energy lobby, for example, represents 9% of federal parliamentary accreditations. The construction and real estate sectors and the culture, media and telecommunications sector are also well represented (8% and 10% of accreditations respectively). The agricultural lobby is in a minority with only 3% of accreditations.

² Each person with access authorization is officially registered:
www.parlament.ch/centers/documents/de/zutrittsberechtigte-nr.pdf

FIGURE 4 — Distribution of parliamentary accreditations per sector in Switzerland.

Adapted from von Boas and Rittmeyer, 2016.



THEORY

COMMENT

TOOLS

EXAMPLES

The activity of lobbyists is increasingly focused on influencing the parliamentary stage of policymaking and on reaching legislative committees. Each sector is usually linked to individual parliamentarians from different parties. This complex network of relationships and influence is driven by the multi-party system, and in particular by the absence of a majority within the Swiss Parliament.

The view of professional lobbyists

As part of the *PSC Science & Policy training course on 'Building political support'*, two professional lobbyists from two different sectors, one from environmental policy, one from a business association were interviewed and asked to share their vision of lobbying in Switzerland. Felix Wirz, manager of the lobby association *Ecopolitics*, described the role of lobbyists as bringing people from different parties together to build a coalition. Another lobbyist, Tim Frey differentiated two important functions of lobbyists. "First, decision-makers get background information from lobbyists about interest groups which have the right to be heard because they are an important part of society. On the other hand, lobbyists help these stakeholders to build strategies to raise politicians' interests on specific issues". Lobbyism is thus legitimated by the low level of professionalization among Swiss parliamentarians and the resource constraints to which they are subject, compared to the large range of issues they have to discuss.

The transparency issue

Recent criticism has been raised on the transparency of the system (Serdült, 2010). In accordance with *Article 11 of the Parliamentary Act (2017)*, all national and state institutions are required to disclose their activities in management and supervisory bodies, but only over the past few years. Professionals permanently accredited to enter Parliament building have to register their name and function on a list available for public inspection following *Article 69 of the Parliamentary Act (2017)*. Access badges are given to these professionals. However, lobbyists are not required to disclose the names of the clients they represent. In addition, daily accreditation to enter the Parliament is not subject to public disclosure.

New parliamentary initiatives are currently discussing how to increase the transparency of the system. One of these is the initiative led by the *Socialist Party* member Didier Berberat³. Meanwhile, the Swiss Society for Public Affairs (SSPA/SPAG), the lead association of lobbyists, now requires its member to declare the mandates from their different clients; otherwise they could be excluded from the association.

³ Parliamentary initiative 15.438 for a regulation aiming to establish transparency with regard to lobbying at the Federal Parliament:
www.parlament.ch/fr/ratsbetrieb/suche-curia-vista/geschaefft?AffairId=20150438

3. TOOLS for building political support

Luisa Last

Coordinator of the PSC Science & Policy training program for graduate students,
Zurich-Basel Plant Science Center, Switzerland

THEORY

COMMENT

TOOLS

EXAMPLES

- 3.1. Role play: meeting a Member of Parliament (MP)**
- 3.2. World café**

32
34

3.1. Role play: meeting an MP

Purpose

Meeting an MP is an opportunity to inform interested parliamentarians about a current topic, to network with them, and to gain political support. Organizing a fictitious parliamentary meeting in the form of a role-play will help you understand the specific steps of the organizational process. It is good practice for applying formal procedures to maintain order and to control the direction of a meeting.

Time needed

2 hours.

Implementation

Preparation

Topic

A defined group of students (= the organizing committee) needs to agree on a topic. The topic should either be of high relevance or one that is under debate.

Date

All politicians are extremely busy and have tight schedules during the parliamentary season. It is, therefore, important to reflect carefully on a suitable date and location for the meeting (e.g., a business lunch close to the Parliament building).

Invitations

In general, an invitation for the meeting needs to be sent to all members of the National Council and should attract their attention immediately. For the fictitious meeting, participants (members/ commissions/ parliamentary groups) should be considered carefully in order to identify the most relevant parliamentarians for the particular topic to be addressed and for the anticipated discussion. The organizing committee should reflect on their selection.

A tool that can be introduced to assist in the selection is *smartvote* (see page 21).

Conducting the meeting

The issue, topic or challenge should be presented briefly (max. 10 min), the language should be non-academic and the contents suitably framed for the politicians. There should be time for questions and discussion in the agenda.

Since this is a fictitious meeting, the other participants in the workshop will act as the invited parliamentarians; they will give critical arguments and pose questions.

Limitation

Conducting a fictitious parliamentary meeting requires a general understanding of the topic that is going to be presented and discussed. Moreover, the views of the potential stakeholders involved in the discussion need to be analyzed beforehand.

3.2. World café

Purpose

The world café is a format for a multi-stakeholder meeting that can be used to inform parliamentarians about topics, ideas, stories, experiences and project results that are of mutual interest. The key purpose of the world café is to come together and to discuss new visions and possibilities for solutions. The diversity of the group in terms of interests, hierarchy, gender, age, educational background, etc., is the key to a successful meeting (Schieffer et al., 2004).

Applications

The primary advantage of the world café method is the ability to engage a large group of stakeholders in a process that enables dialogue and contributions from all participants. A world café is a great opportunity to generate and share input such as expert knowledge and perspectives, while stimulating discussions and pushing the exploration of challenges, actions, opportunities and possibilities. The method cultivates trust and deepens relationships among participants.

From a scientist's perspective, the world café method can be used to gather scientific input that has been discussed from multiple perspectives by different participants. This includes thematic input, as well as clear framing of questions.

Time needed

Introduction to the topic: 1 hour.

World café discussions: 1 day.

Plenary discussion: 15–30 minutes.

Implementation

The world café starts with an introduction to the topic and to the questions open for discussion. Participants rotate among multiple tables several times. Each table will have a specific question to be discussed throughout the rotation, which will be recorded by an appointed moderator. The objective is to create a kind of café ambience in order to facilitate conversation and enable contributions from every participant. In the end, a round-up is needed to make sure that all participants benefit from the outcome of the discussions. Together, a take-home message can be formulated.

World café preparation

Topic

The first step is to clarify the aim of the particular world café. This requires thoughtful consideration about the topic, theme or issue that is going to be addressed, as well as the questions

that will be discussed. Questions should be relevant to the participants and leave room for discussions, for exploring possibilities (e.g., open-ended questions), and for creativity.

Invitations

Invite the most relevant and constructive mix of participants. Stakeholder analysis is one method to identify potential participants. See 'Workbook 2: Stakeholder engagement'.

Location

Be sure to organize appropriate facilities for a café ambience (e.g., round tables, seats), and set up the time-frame and agenda in advance. Organize the material for a proper gathering and for recording discussion points and outcomes (pens, paper, flip charts, etc.).

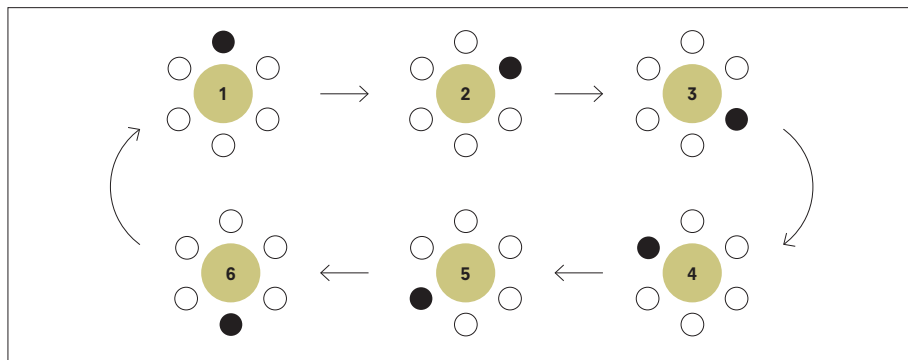
Procedure for a world café

First a **facilitator** (host) should be selected for the overall process. This can either be a team or a single person who welcomes participants, sets the scene, introduces the purpose of the meeting, explains (and keeps track of) the logistics and supports discussion at the various tables (for more details, see Slocum, 2006).

The participants need to place themselves at a table (i.e., at least three tables) hosted by a **moderator** (see figure 5). At each table, a note taker should be selected. The process begins with the first of three or more discussion rounds. Each round lasts at least 15 minutes, so that everyone at the table can contribute. After the first round, each participant moves to the next table. The table moderator (host) might stay (i.e., summarizing what has been discussed before) or change as well.

Questions, tables and rounds can be arranged in multiple ways. For example, each table can address a different question discussed by a changing mix of participants.

FIGURE 5 — World café setting.



Another option is for each table to address the same question with a changing group of participants, and there could be additional rounds with either a new question or a question that builds on previous discussions.

Conclusions

Collecting information and keeping records are important aspects for formulating the outcome of discussions. For example, a small group might receive the relevant information from the note-taker at the table and summarize the main discussion points (e.g., in a plenary discussion) with regard to a specific question. Illustrations or notes can be visualized on flip-charts and preserved.

Additional steps could include the integration of the discussion into work projects (e.g., reports, scenario building exercises, further discussion panels, etc.) or providing a summary of the relevant with regard to the questions that have been addressed.

Limitation

The world café method is more intended for exploration and discussion than for deriving a solution or answer. Moreover, it is not applicable if the main objective is gathering information, such as specific expert knowledge (e.g., collection of one-way information), without focusing on dialogue and its advantages. Finally, effective use of the world café method requires at least 12 participants.

SOURCE

Slocum, N. (2006). Participatory methods toolkit. A practitioner's manual. Method: the world café. www.kbs-frb.be/publication.aspx?id=294864&langtype=1033

MORE READING

Schieffer, A., Isaacs, D., Gyllenpalm, B. (2004). The world café: part one. World business academy transformation. *Rethinking the Human Spirit in Business*, 18(8): 1–14.

4. EXAMPLES for building political support

Urs Neu

Deputy director of ProClim – the Forum for Climate and Global Change at the Swiss Academy of Sciences (SCNAT), Switzerland

Marcel Falk

Head of communications, Swiss Academy of Sciences (SCNAT), Switzerland

Chrissie Rey

Professor of plant pathology, virology and microbiology, School of Molecular and Cell Biology, University of Witwatersrand, South Africa

- | | | |
|-------------|---|-----------|
| 4.1. | ProClim – an interface organization facilitating the science-policy dialogue about climate change in Switzerland | 38 |
| 4.2. | Building political support for cassava research in South Africa – a personal journey | 41 |

4.1. Example 1

ProClim – an interface organization facilitating the science-policy dialogue about climate change in Switzerland

Responding to climate-related risks involves making decisions and taking actions in the face of continuing uncertainty about the extent of climate change and the severity of its impacts. Climate warming has widespread impacts in many domains. However, impacts are not felt immediately. These impacts are often qualitatively known (if at all) before they can be quantified. Although the need for action is broadly admitted, there are many barriers that slow it down. For example, most people do not see or feel that the effect of their actions will mainly be relevant for future generations, and limiting CO₂ emissions is often associated with reductions in current standard of living.

What is ProClim?

ProClim is one of several thematic task groups of the *Swiss Academy of Science (SCNAT)* and has been coordinating the Swiss science-policy dialogue on climate change, mitigation and adaptation for 30 years. ProClim seeks to facilitate both integrated research activities and the necessary linkages among scientists, policy-makers, economy and the public. It provides state-of-the-art knowledge regarding any aspects of climate science that is of relevance for current political and societal challenges. A broad community of hundreds of scientists from different disciplines contribute to it.

The main tasks of ProClim are:

- To enhance knowledge exchange and networking within the scientific community.
- To integrate Swiss research in international programs.
- To promote the dialogue with decision-makers in politics and business.
- To inform the public, the media and the economy.
- To consult politics and administration.

TABLE 1 — Instruments used by ProClim in the policy process.

Interface towards	Instruments
Parliament Government	National assessments. Advice to the ministry. Projects supporting federal agencies.
Media Public Economy	Facts and figures for the public. Dialogue with the economy and business.
Swiss research	Service for scientists: databases, workshops on emerging topics, travel grants to participate in the IPCC, counseling and reports.
International programs	For example Future Earth, WCRP, UNFCCC.

The SCNAT links the sciences, provides expertise, furthers the dialogue between science and society, identifies and evaluates scientific developments, and lays the groundwork for the next generation of natural scientists. It incorporates numerous scientific societies with a total of some 35'000 individual members working at the regional, national and international level. The breadth of its support makes it a representative political partner.

How does ProClim engage in the decision-making process?

ProClim uses several instruments to implement scientific evidence into the decision-making process and to build political support (see table 1). For example, it prepares fact sheets on the themes of current (or likely future) public or political discussion, organizes public events where scientists present an overview of recent reports like the ones of the *Intergovernmental Panel on Climate Change (IPCC)* or scientific findings of conferences, and informs the media on recent developments, as well as answering questions from journalists.

The economy is addressed either in direct collaborations (delivering assessments, giving overview talks, etc.) or indirectly within the framework of ProClim’s general work (publications, etc.).

Preparing comments on the Swiss Energy Strategy 2050 as an example

Stabilization of atmospheric greenhouse gas (GHG) concentrations requires full decarbonization – regardless of the mitigation goal. The energy supply is a primary driver of GHG emissions (35%), therefore the *Swiss Energy Strategy 2050* is important. Since mitigation of climate change and energy policy are closely linked, ProClim works together with the energy commission of the scientific academies and engages in the policy dialogue on energy themes. Thus, ProClim has coordinated scientific comments on proposed government energy strategy. Together with the energy commission, they have drafted comments on proposed changes to laws, as well as other aims and measures planned to modify the Swiss energy



supply system until 2050. This draft has been sent for a broad review to numerous experts in the affected fields (energy supply and technology, buildings, industry, traffic, health). After assimilating the corresponding feedback, a second review round followed. Taking into account the feedback of this second round, comments were finalized and then approved by the SCNAT's member bodies. The SCNAT response was one of the most frequently cited documents in the government's consultation report and representatives of its team of authors have been invited to the environment commission of the Swiss Parliament to present their comments and recommendations.

It is difficult to assess the influence of the scientists' comments. Some of the recommendations have been adopted, but many were also proposed by other parties. Others have not been incorporated, perhaps for other important political reasons like societal acceptance, financial restrictions, etc..

Lessons learned

- Scientists need platforms where they can meet politicians (e.g., so-called parliamentary meetings, visits to the Parliamentary Commission meetings, information exchange channels, etc.) on a regular, institutionalized basis to build up the trust and personal contacts that are crucial for effective exchange.
- Long-term interface organizations with collaborators and employees trained in science and policymaking are most effective for engaging with decision-makers.
- Science don't need to speak with one voice. However, the voice of science should be coordinated, including consent and dissent.
- Science does not have the perfect solution. However, it presents options for solutions with their advantages and disadvantages.

MORE READING

ProClim reports & factsheets

<https://naturalsciences.ch/service/series/78054-proclim-reports-factsheets>

4.2. Example 2

Building political support for cassava research in South Africa – a personal journey

Cassava (*Manihot esculenta*) is recognized as one of the most important crops that contribute to poverty alleviation and food security in Sub-Saharan Africa. It is a staple food and carbohydrate source for over 700 million people in tropic and subtropical areas of the world. It grows in marginal soils. It is drought tolerant, which makes it a favorable crop in climate change. Cassava has high potential to contribute to food security and is a valuable source of raw material for industrial uses and biofuels in South Africa and other countries in Sub-Saharan Africa (Baguma et al., 2017). In South Africa, small-scale farmers in the Mpumalanga, Limpopo and Kwazulu-Natal and provinces grow cassava. Mainly subsistence farmers grow it as a food security crop alongside maize. However, yields are too low (> 30 tons/hectare for commercial success), therefore, imported starch is used as raw material for the paper, food and pharmaceutical companies. Cassava is currently targeted in South Africa as a potential industrial crop and part of the *Bio-economy Strategy* (Department of Trade and Industry, 2016).

Interest in commercialization of cassava started in South Africa in the 1940s. Early breeding programs were carried out until the end of the 1970s with varieties from the *International Center for Tropical Agriculture (CIAT)* and the *International Institute of Tropical Agriculture (IITA)*. Trials in KwaZulu-Natal province to use cassava in an ethanol plant started but were shut down in 1989 due to low yields and being non-economically feasible because of competition from sugar cane and maize starch by-products (Daphne, 1980).

Biotechnology approaches to improve traits such as starch yield and virus resistance in farmer and industry-preferred cassava cultivars would contribute to socio-economic benefits for both sectors. Small scale and commercial farmers' income and improved livelihood would benefit from improved cassava yields as a raw material for high-value agro-processing and other applications.

My contributions to agricultural biotechnology policies in cassava

Science-policy is concerned with the allocation of resources for the conduct of science toward the goal of best serving the public interest. Focus areas of my science-policy dialogue include long-term and persistent interactions with various players, the first being the farmers. Secondly, I had to convince government, funding agencies and industry to financially support cassava biotechnology research. The next dialogue was to create awareness for

the need to translate the knowledge produced from cassava biotechnological research into both socio-economic and public domains. The socio-economic aspect was to enable farmers to grow cassava as a livelihood and be able to contribute to rural development, and this required dialogue with the national agricultural agencies. In order to convince government and industry that translation of cassava biotechnological research into technological innovation to promote commercial product development, competitiveness, economic growth and development was paramount, and buy-in from industry and government was critical. This protracted dialogue over many years resulted in the registration of the *Cassava Industry Association SADC (CIASA)*, whose aims now have a political channel to operate. In summary, activities to achieve these goals included engaging in advocacy networks between academia-industry-government and distribution of expertise in scientific collaborations and in advising and mentoring young scientists.

Timeline

- | | |
|------|--|
| 2003 | Contribution to establishing the first <i>South African National Biotechnology Strategy</i> and <i>Biotechnology Regional Innovation Center (BRIC)</i> : an example of meaningful input and engagement between scientists with policymakers. |
| 2009 | OECD – Consensus document on compositional considerations for new varieties of cassava: key food and feed nutrients, anti-nutrients, toxicants and allergens. Series on the safety of novel foods and feeds No.18: a 3-year journey of wide consultation between country members, experts, and final consensus. |
| 2015 | Official registration of the <i>Cassava Industry Association (SADC)</i> with government: a long journey of dialogue between academia; industry (Tongaat Hulett; <i>Industry Development Cooperation (IDC)</i> ; <i>Casquip Starch C. Pty Ltd</i> ; <i>Ingredion</i> ; and others); farmer associations; <i>Technical Innovation Agency</i> ; <i>Agricultural Research Council (ARC)</i> ; <i>Council for Industrial and Scientific Research (CSIR)</i> and other key government players. |
| 2017 | Working with CIASA and <i>Wits Enterprise</i> on a <i>Cassava Market Survey</i> ; with government (ARC) on a national cassava germplasm trial; and negotiating a land lease with ARC in Mpumalanga to do non-GM and GM trials in the future. |

Lessons learned

- **Scientists need to tap into government networks.** Government networks are forums for policymakers, practitioners, academies, science societies and academics to share experience, build capacity, and develop theoretical and practical approaches to the use of scientific evidence in informing policy at all levels of government.
- **Participate for long periods.** Policy issues often require decades to resolve. As a scientist, I have found that the acceptance of innovative methods and findings often takes a decade of effort to diffuse throughout the policy community.
- **Trust and communication.** Knowledge acquisition and network building requires time, effort, trust; and the connections scientists and policy-makers form in the course of such learning are of as much value as the technical knowledge.
- **A science-policy is only as good as the quality of the dialogue.** Contributions and input from scientists and other stakeholders, on the one side, and the responsiveness and leadership of the policy-makers, on the other side, makes a productive dialogue.
- **Progressive policy** is the co-operative domain of the younger scientists, who are aware of the generational needs of society and have foresight and vision, and the more experienced scientists who have the experience and hindsight.
- **My advice.** Science-policy is not for everyone. Only do it if it excites you; if not, hang onto your laboratory pipettes.

How can scientists build successful policy support?

Build networks.

- Advocacy coalitions are complex entities composed of large numbers of people (with complementary expertise) who collaborate to implement policies they collectively favor.
- Careful selection of appropriate government players to engage with is advisable.
- Participate for long periods of time: continuing dialogue (in for the long haul) between policymakers (local and national government); industry; scientists; and the public takes patience.

- Build up collective pressure on the government. The success of genetically modified organism (GMO) policy in South Africa was advocated through the pressure from a strong group of plant scientists; working alone was not efficient.

Translate the evidence.

- Past evidence may not work: scientists need to show politicians the future, for example, through doing foresight exercises.
- You have to apply your analytical methods as key to the application of expertise to policy. Back up with current and projected data and figures.
- Do market research and feasibility studies: show evidence; present sound research findings. Anchor your research findings in context: socio-economic benefits, sustainability and competitiveness of the technology. Show economic, social and environmental awareness.
- Make your passion and belief transparent.
- Be persuasive and compelling.

What barriers hinder scientists in building in policy support?

- Lack of knowledge or contacts can be a barrier. Therefore, get advice and assistance from university and other support structures.
- Potential barriers can be public opinion. You need to invest in winning public trust.

- Identify your target 'public' – there are many different publics which create, form around or can be shaped by different issues.
 - People are capable of understanding complex issues and technologies; scientists and policymakers need to communicate clearly.
 - People want to be able to participate in decisions around policy involving science and technology.
 - People are not 'anti-science' or 'anti-technology', on the whole people are hugely appreciative of and excited by the opportunities presented by science and technology. Technology benefits need to be balanced by concerns about such things as priorities, alternatives, control and ownership, safety, equity, regulation and governance.
-
- People often have knowledge that particular specialists may lack.
 - People may ask questions which do not occur to experts.

Public deliberation can help give confidence to policymakers and reduce risk.

Telling someone that you work in science-policy inevitably leads to the same response: What does that mean? Then you try to explain that it involves some vague combination of science writing, communication and advocacy, but that just leads to blank stares and sympathetic head nodding.

In reality, those working in science-policy take what is happening on the bench and bring it to the light of day, showing how discoveries inside the lab will benefit everyone outside of it. This means saving lives, creating jobs and promoting education. Science-policy experts thus serve as the bridge between researchers and the public, using their talents to find ways to translate esoteric, often highly technical scientific issues into something that can be sold as good policy. — Chrissie Rey.

SOURCES

Baguma, Y., Nuwamanya, E., Rey, C. (2017). The African perspective. Developing an African bio-resource based industry: the case for cassava. In: Virgin, I., Morris, E. J. (eds.). Creating sustainable bioeconomies: The bioscience revolution in Europe and Africa. Oxford: Routledge Publishers.

Daphne, P. (1980). Cassava: a South African venture. *Optima*, 1: 61–68.

Department of Trade and Industry (2016). The industrial policy action plan IPAP 2016/17 – 2018/19. Retrieved from: www.thedti.gov.za/editmedia.jsp?id=3726

References

- Blumenthal, D. (1996). Ethics issues in academic-industry relationships in the life sciences: the continuing debate. *Academic Medicine*, 71(12): 1291–1296.
- Bütikofer, S., Hug S. (2015). Strategic behaviour in Parliament. *The Journal of Legislative Studies*, 21(3): 295–322.
- Carson, R. (1962). *Silent spring*. Boston, MA: Houghton Mifflin Company.
- Cressey, D. (2015). Debate rages over herbicide's cancer risk. *Nature News*: doi:10.1038/nature.2015.18794
- EFSA (2015). Conclusion on the peer review of the pesticide risk assessment of the active substance glyphosate. *EFSA Journal*, 13: 4302.
- Federal Chancellery (2016). *The Swiss Confederation. A brief guide*. Berne: Federal Chancellery or online: www.bk.admin.ch/dokumentation/02070/index.html?lang=en
- Giger, N., Klüver, H. (2016). Voting against your constituents? How lobbying affects representation. *American Journal of Political Science*, 60(1): 190–205.
- Guyton, K. Z., Loomis, D., Grosse, Y., El Ghissassi, F., Lamia Benbrahim-Tallaa, L., Guha, N., Scocciati, C., Mattock, H., Straif, K. (2015). Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate. *Lancet Oncol.*, 16: 490–491.
- Hürlimann, G., Mach, A., Rathmann-Lutz, A., Schaufelbuehl, J. M. (eds.). (2016). *Lobbying. Die Vorräume der Macht - Les antichambres du pouvoir*. Schweizerisches Jahrbuch für Wirtschafts- und Sozialgeschichte, 31. Zurich: Chronos.
- Kaufmann, R., Hugli, A. (2014). *Innen- und Aussenpolitik von Unternehmen*. SBern: tämpfli Verlag AG.
- Ladner, A. (2014). *The Swiss Parliament: A hybrid system based on the idea of changing majorities*. Political Studies Association. Blogpost in Political Studies Association. Retrieved from: www.psa.ac.uk/psa-communities/specialist-groups/parliaments-and-legislatures/blog/swiss-parliament-hybrid-system
- Lijphart, A. (2012). *Patterns of democracy. Government, forms and performance in thirty-six countries*. New Haven/London: Yale University Press.
- Mahoney, C. (2008). *Brussels versus the beltway: advocacy in the United States and the European Union*. Washington D.C.: Georgetown University Press.
- Mahoney, C., Baumgartner, F. R. (2015). Partners in advocacy: lobbyists and government officials in the policy process. *Journal of Politics*, 77(1): 202–215.
- Oesch, D. (2006). *Redrawing the class map. Stratification and institutions in Britain, Germany, Sweden and Switzerland*. Basingstoke: New York: Palgrave Macmillan.
- Parliamentary Act (2017). *Bundesgesetz über die Bundesversammlung (Parlamentsgesetz, ParlG) vom 13. Dezember 2002 (Stand am 1. November 2015)* Retrieved from: www.admin.ch/opc/de/classified-compilation/20010664/201511010000/171.10.pdf
- Pielke R. A. (2007). *The honest broker: making sense of science in policy and politics*. News York: Cambridge University Press.
- Serdült, U. (2010). *Referendum campaign regulations in Switzerland*. In: *Financing Referendum Campaigns: 165–179*. UK: Palgrave Macmillan.
- The Federal Assembly – the Swiss Parliament (2017a). Retrieved from: www.parlament.ch/en/%C3%BCberdas-parlament-home
- The Federal Assembly – the Swiss Parliament (2017b). *Overview – briefings*. Retrieved from: www.parlament.ch/en/ratsbetrieb/sessions/overview-briefings
- The Federal Assembly – the Swiss Parliament (2017c). *The Committees*. Retrieved from: www.parlament.ch/en/organe/committees
- Umweltallianz (2017). *Über uns: Umweltallianz*. Retrieved from: www.umweltallianz.ch/de/ueber-uns/umweltallianz.html
- Von Boas, R. & Rittmeyer B. (2016). *Die Interessenbindungen der National- und Ständeräte. Neue Zürcher Zeitung*. Retrieved from: www.nzz.ch/schweiz/aktuelle-themen/lobbying-im-bundeshaus-interessenvertreter-von-links-bis-rechts-ld.7112
- Weiler, F. & Brändli, M. (2015). Inside versus outside lobbying: How the institutional framework shapes the lobbying behaviour of interest groups. *European Journal of Political Research*, 54(4): 745–766.

Index

A

Advocacy 23, 24, 25, 26, 42, 43, 45

C

Cantons 10, 12, 14, 15, 17, 18

Chamber 13, 15, 16, 18, 27

Chambers 15, 16, 27

Concordance 11

Consultation 13, 14, 18, 38, 40, 42

Council of States 12, 15, 16, 27

D

Direct democracy 10, 11, 17, 24

E

Election 10, 12, 15

Elections 10, 12, 14, 15

F

Facultative referendum 17

Federal Administration 14, 15, 18

Federal Assembly 10, 14, 15, 16, 20

Federal Council 10, 11, 13, 14, 15, 16, 18

H

Hearings 15

Hybrid system 10, 46

I

Initiative 13, 14, 16, 17, 18, 29

Initiatives 17, 29

Interpellation 16

L

Law-making process 13, 14, 15, 18, 19, 27

Legitimacy 26

Lobbying 18, 23, 24, 25, 27, 29

M

Majority system 12, 15

Majority systems 12

Mandatory referendum 13, 17

Motion 13, 14, 16

N

National Council 12, 15, 16, 27, 32

P

Panachage 15

Parliament 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 27, 29,
31, 32, 39, 40

Parliamentary system 10

Political system 10, 24, 27

Political systems 5

Postulate 16

Presidential system 10

Proportional representation 12

R

Referendum 11, 13, 17, 18

S

Scientific advocacy 25

T

Transparency 25, 26, 29

