Continuous education of research staff (staff exchange and mobility) by Jan Fryk

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Friends,

Before I start my little introduction to the discussions around this topic, I have to stress that my views on the matter are very much influenced by the conditions under which Skogforsk(S) is operating. Then you have to bear in mind that Skogforsk is a <u>private</u> institute conducting <u>applied R&D</u> for, and in very close cooperation with the forestry sector.

General

In general terms, keeping the competence of staff up to date and on the edge, is actually a matter of long term survival. Therefore, it is necessary to have a basic <u>strategy</u> outlining how to safeguard supply of competence and continuous competence development. Once the strategy is set, one must also allocate adequate <u>resources</u> for these means. How much funding to set aside for competence development is of course depending on circumstances and the level of ambition, but 5-10 %, of the total annual turnover may be a reasonable figure.

Owning or buying competence

In a perfect world, the competence mix of an organization corresponds exactly to the desired competence profile as defined by the tasks at hand at every given moment in time. However, in the imperfect and ever changing world, that I believe most/all of us are facing, this is not easily accomplished. If at all possible?

Going back to the strategy issue, I think one important component is to define what kind of competence the organization needs of its own, in order to carry out R&D within its core areas. Here, one may very well conclude it wise to reserve funding for buying external competence for specific research tasks, and/or for hiring supplementary research capacity on a temporary basis. This leads to the fact that one does not necessarily have to be fully staffed at all times. On the contrary, it can be a very good strategy to leave significant room for temporary competence support in order to enable a certain degree of flexibility.

Establishing alliances and cooperation with other research bodies is of course another way of getting access to supplementary competence.

Education

As initially indicated, competence management is crucial. So, another strategic matter is to create a general awareness of the necessity for continuous competence development inside the organization. Likewise to encourage and to make room for educational undertakings. However, to my meaning, it is not only the employers responsibility to call attention to this, it is also up to each person to feel responsible for his/her own development.

If possible, all staff should have individual development plans. Such plans can preferably be drawn up in conjunction with the annual talks each employee have with his/her boss. Required funding and time should then be ear marked for the intended activities. These plans should also be followed up and revised on a regular basis.

This is not to say that everyone has to go through some kind of further education every year. The message is rather to adopt a systematic approach to the issue, and as far as possible and relevant, to adapt the measures to individual and organizational needs. As regards the latter, it can sometimes be necessary to transfer staff into new areas in order to meet new demands, which can require significant educational measures.

Ability to maintain individual competence may very well be considered salary-wise. Staff not keeping up according to standards may suffer somewhat in this respect, while others, more offensive and ambitious may gain. Of importance here is of course that everyone is given equal opportunities over time.

Scientific vs. practical merits

In an applied research institute working closely with the forestry sector, one has to find a proper balance of competence as regards staff with scientific back-ground and staff with other experience, for instance from practical forestry. Hence, there may be a need to educate/train the former in knowledge and understanding concerning the latter and vice versa. I'm saying this to make it clear that education of research staff is not by definition always the same as scientific/theoretical education.

In some cases it might actually be more difficult to convey practical understanding to scientists than the other way around. Close R&D-cooperation with the forestry sector helps out. One way that has proven quite successful here, is to engage researchers in contract research (consulting), for solving well defined operational problems inside of forest companies. A somewhat similar approach is to "lend out" staff to an enterprise for a period of time. However, in such a case there is an obvious risk (or possibility) that the person in question will be recruited permanently (provided of course he/she has done a good job).

An ideal, and often thought of model, is to temporarily exchange staff with forestry organizations. Regrettably, this seems to be practically rather complicated since the forestry organizations of today are so short on staff and high on work loads, that there is hardly any room or time for such exchanges.

Enhancement of scientific skills

Apart from the situation in university institutions, providing scientific education is not necessarily a prioritized part of an institutes mission. Nevertheless, I think it is a great advantage if the institute can act as host for a number of external Dr-students, and/or to enable its own staff to sign up for Dr-programs in combination with their ordinary jobs. Such solutions can be very effective as enhancing scientific quality and skills in the organization.

The rope-trick here is again to find a proper balance in numbers (and funding). Too high a number of Dr-students may crave too much supervision time. And a large proportion of staff tied up in courses and thesis work, can lead to reduced flexibility and unwanted limitations in operational research capacity.

Encouraging publishing in scientific peer-reviewed journals can also be looked upon as having an educational aspect. The same applies to participation in and organizing conferences, seminars, etc.

Lending possibilities to senior research staff to act as part-time adjunct professors at universities may also be seen as a sort of continuous education. Besides stimulating competence development among seniors it serves as a link of cooperation between institute and university, which can be fruitful in several ways.

A final example of continuous educating of researchers is the exchange of staff with other research organizations, nationally or internationally. Even if this is not a matter of education in terms of attending courses etc., it certainly brings about new ideas and widened perspectives, which is of advantage for the individual as well as for the organization as such.