ABSTRACT. A Lie group G in a group pair (D, G), integrating the Lie algebra $\mathfrak{g}$ in a Manin pair $(\mathfrak{d}, \mathfrak{g})$, has a quasi-Poisson structure. We define the quasi-Poisson actions of such Lie groups G, and show that they generalize the Poisson actions of Poisson Lie groups. We define and study the moment maps for those quasi-Poisson actions which are hamiltonian. These moment maps take values in the homogeneous space D/G. We prove an analogue of the hamiltonian reduction theorem for quasi-Poisson group actions, and we study the symplectic leaves of the orbit spaces of hamiltonian quasi-Poisson spaces.